

An Applied Linguistic Approach To Discourse Analysis

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CHAPTER 1

INTRODUCTION: APPLIED LINGUISTIC APPROACHES

1.1. The use of linguistic description

My original aim in undertaking this research was to provide a characterization of a specified area of scientific English which would serve as a basis for the preparation of teaching materials for people learning English as a service subject for the furtherance of their scientific studies. Such an aim seemed to fall neatly within the scope of applied linguistics since it was directed towards meeting an existing pedagogic need on the one hand, and on the other involved the application of an existing model of grammatical description which had already been used for the kind of textual analysis I had in mind.

The pedagogic need had arisen from an increasing awareness that the teaching of English was being called upon to perform an essentially auxiliary role to which existing attitudes and techniques were not naturally suited: specialist groups of learners were emerging who needed the language to gain access to the basic content of their speciality. From the mainstream of general ELT were appearing tributaries of ESP (English for Special Purposes) and EST (English for Science and Technology). There was a call for the provision of courses directed at meeting specialist needs and based on a sound description of the different “varieties” of English to which these needs corresponded (see Perren 1969, 1971).

The linguistic model which promised to provide the means of describing these different “varieties” of English was Halliday’s scale and category grammar. In Halliday, McIntosh and Stevens (1964) we find what amounts to a manifesto for the applicability of this grammar for the analysis of different areas of English usage as a preliminary to the preparation of specialist teaching materials. Pointing to the need to direct English teaching to meet the emerging requirements of “an institutional kind”, mention is made of “English for civil servants; for policemen; for officials of the law; for dispensers and nurses; for specialists in agriculture; for engineers and fitters.” (Halliday, McIntosh and Stevens 1964: 189). To cater for these special needs for English, linguistic analyses of the “registers” associated with each have to be carried out:

Every one of these specialized needs requires, before it can be met by appropriate teaching materials, detailed studies of restricted languages and special registers carried out on the basis of large samples of the language used by the particular persons concerned. It is perfectly possible to find out just what English is used in the operation of power stations in India: once this has been observed, recorded and analysed, a teaching course to impart such language behaviour can at last be devised with confidence and certainty.

(Halliday, McIntosh and Stevens 1964: 190)

Here it seemed was a clear delimitation of a relevant area of research in applied linguistics with a ready-made descriptive model provided. It soon became apparent, however, that it was based on two very questionable assumptions. The first comes to light when one begins to consider what kind of information

emerges from the analysis of a corpus of language in terms of grammatical categories. What emerges in fact is information about the relative frequency of the tokens of different types of linguistic element: the passive, the past tense, the non-defining relative and so on. What we get from such an analysis is a characterization of a corpus of language as an exemplification of the code as represented by a particular model of grammar. This may serve in some sense as a validation of the model but it gives little indication as to how the code is being put to actual use in the performance of different acts of communication. It is not enough, for example, to say that the passive is of common occurrence in scientific texts: we also want to know how this fact contributes to the particular character of a scientific statement. In spite of what is said in the above quotation, in other words, the observation, recording and analysis of text with reference to linguistic categories does not constitute a characterization of “language behaviour” if by this we mean the way people use language to communicate. The first questionable assumption then has to do with the extent to which a grammar can be used to account for language use and consideration of this question must be the first step in outlining a satisfactory approach to the analysis of discourse.

The first difficulty in pursuing my original research aim arose then with the realization that the characterization of language use was not simply a matter of applying existing models of grammatical description to the analysis of data. To put it another way, discourse was not simply linguistic data but a form of communication whose character could not be captured by a statistical statement of the relative frequency of its constituent linguistic elements. Lurking behind the assumption that it can be so characterized, as implied in the quotation cited above, is the old ambiguity in the term “language”, which both de Saussure and Chomsky have been at such pains to resolve, and a fundamental confusion about the scope of grammatical description. This issue is taken up in the next chapter.

1.2. Theoretical value and pedagogic utility

The first assumption has to do with basic theoretical issues concerning the nature of language and the proper domain of linguistic description. The second has to do with the relationship between linguistics and language teaching and the manner in which such a relationship is mediated by applied linguistic studies. What is suggested in the quotation, and indeed throughout the whole book from which it has been drawn, is that the satisfactory preparation of language teaching materials is dependent upon a prior linguistic analysis. The image one has is of the applied linguist in attendance on the linguist, and waiting for an exhaustive linguistic description which he can then apply to the production of “appropriate” teaching materials. But of course the linguist’s criteria of theoretical adequacy do not have to coincide with the language teacher’s criteria of pragmatic appropriacy, and the applied linguist’s concern must be with the latter rather than the former. It is true that the precision with which the linguist is required to investigate linguistic phenomena may lead him to discoveries beyond the reach of the relatively untrained awareness of the teacher, but it does not follow that such discoveries will always be relevant to a particular teaching situation. What is theoretically valid may have

little pedagogic utility and what has pedagogic utility may have little or no theoretical value (see Corder 1973). This is a point which the more proselytizing linguist tends to ignore. Again we may quote from Halliday, McIntosh and Stevens (1964) since, again, this book expresses a very common and very pervasive view of the role of linguistics in language teaching pedagogy:

(the teacher) is teaching something which is the object of study of linguistics, and is described by linguistic methods. It is *obviously* desirable that the underlying description should be *as good as possible*, and *this means that it should be based on sound linguistic principles*.

This is the main contribution that the linguistic sciences can make to the teaching of languages: to provide good descriptions. Any description of a language implies linguistics ... It is a pity then not to apply the linguistics best suited to the purpose. *The best suited linguistics is the body of accurate descriptive methods based on recent research into the form and substance of language*. There is no conflict between application and theory: *the methods most useful in application are to be found among those that are most valid and powerful in theory*.

(Halliday, McIntosh and Stevens 1964: 166-7; my emphasis)

The notion that what is a good description from the linguistic point of view must necessarily be good for language teaching appears to be a matter of faith rather than of reasoned argument. Moreover it leads to a number of practical difficulties. The establishing of “accurate descriptive methods” has proved to be extremely elusive, and there is a good deal of controversy as to what “sound linguistic principles” might be. One has only to refer to Postal (1964) to see how precarious the kind of methods and principles that the above quotation are referring to can prove to be. One can hardly expect language teachers to be pedagogic camp-followers after the style of Paul Roberts (see Roberts 1956, 1962, 1964) and to adjust their approach to teaching in accordance with the shifts of linguistic fashion. In fact, Halliday himself later acknowledges (Halliday 1964) that it may be possible to think of various descriptions of language, subject to different standards of adequacy according to their purpose, rather than of one “correct” or “accurate” one. Although such a view might be criticized on theoretical grounds, as it is for example, in Wales and Marshall (1966), it would appear to be the only valid one for the applied linguist to take. It happens that the line taken by Halliday in Halliday (1964) runs counter to the psycholinguistic orientation to language study which Wales and Marshall adopt: paradoxically the idea that there may be different linguistic descriptions according to purpose does not suit their particular purpose. But there is no reason why their special pleading should be given special status.

But if linguistics cannot provide descriptions which are good for all purposes and which therefore can automatically serve as a basis upon which teaching materials “can at last be devised with confidence and certainty”, what contribution does linguistics offer to language teaching pedagogy? I think the answer to this question is suggested by the distinction that Wilkins makes in a recent book between three ways in which linguistic theory may have an effect on the practice of the language teacher.

1.3. The use of linguistic insights

Wilkins discusses the relation between linguistics and language teaching under three heads: insights, implications and applications. By implications he means essentially the relationship between psycholinguistic theories of language learning and the way the teacher presents language in the classroom. We are less concerned with this aspect of the relation than with the other two. It is the distinction between insights and application which is of particular interest in the present discussion. To quote Wilkins himself:

By 'insights' I mean linguistic notions that increase one's understanding of the nature of language and consequently of the nature of language learning. They do this without necessarily providing specific points of information that can be built into language teaching. (Wilkins 1972: 217)

Such a provision of specific points constitutes application. Although one might wish to take issue with Wilkins on the notion implied in this quotation by the term "consequently" that an understanding of the nature of language necessarily entails an understanding of the way it is learned (which incidentally tends to efface the difference between insight and implication), the distinction that he makes here is an important one. As we have seen, the assumption in Halliday, McIntosh and Stevens (1964) is that the contribution that linguistics makes must take the form of application, and the role of the applied linguist is then seen to consist of effecting the necessary transition from linguistic description to pedagogic prescription. But if the contribution of linguistics lies principally in the provision of insights as Wilkins suggests, then the role of the applied linguist becomes a very different one, as we shall see.

The "detailed studies" of language which Halliday, McIntosh and Stevens suggest should form the basis of the contents of teaching courses have in practice had little effect on such courses in the past. What seems to be carried over from linguistic descriptions is not so much the detailed information they contain nor the manner in which this information is given formal expression but the attitude to language which such descriptions imply. It is linguistic theory in general rather than its particular descriptive results which appear to have had the most influence on language teaching. Referring to remarks made in Saporta (1967), Wilkins observes:

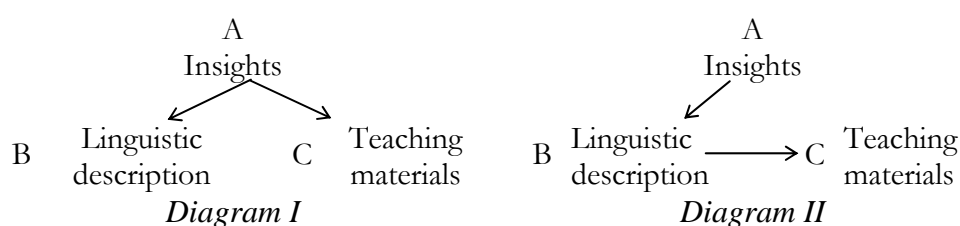
It has been pointed out often enough before that *linguistics* has had less influence on the *content* of language teaching than *linguists* have on the *methods* of teaching. How odd it is that in the one area where the linguist is entitled to expect that his work will influence language teaching, it has scarcely done so, but that in the field of methods where he cannot legitimately claim that he should be listened to, he has been responsible directly and indirectly for many developments in the last thirty years.

(Wilkins 1972: 223)

But this state of affairs is perhaps not quite as odd as it might at first appear. Any linguistic description can be thought of as an exploitation of certain insights about the nature of language, a detailed and explicit working out of theoretical implications without the constraints imposed by the criteria of practical utility.

The preparation of teaching materials is similarly an exploitation of such insights but directed not towards the further substantiation of the theory but towards a practical pedagogic output. Hence it is not surprising that the detailed formalizations of linguistic descriptions should not be taken over directly into language teaching: they derive from technical theoretical requirements of presentation which do not correspond at all with the kind of practical requirements with which the language teacher is concerned. This is not to say that the formal linguistic description might not sometimes suggest ways in which a pedagogic description might be made, but if it does so it will only be because it represents a particularly good illustration of the insight which the teacher wishes to exploit and not because it is “good” or “sound” or “valid” from a theoretical point of view.

What I am suggesting is that instead of thinking of the relation between linguistics and language teaching as one of simple application, as Halliday, McIntosh and Stevens among others appear to do, one should perhaps think of it more as a matter of the adaptation of theoretical ideas to the language teaching situation. In other words, we might think of the relation between the two as represented in Diagram I below rather than as represented in Diagram II:



The essential difference between the two representations of what in effect constitutes the domain of applied linguistics is that in the first it is accepted that the language teacher may make his own direct use of the insights provided by linguistic theory without having to wait for these insights to be given explicit expression in the form of a linguistic description. To put the matter simply one might say that what is being applied in applied linguistics is linguistic theory rather than linguistic description. Since this is the case, there is of course no need to maintain the same principle of consistency that is required for the latter: the applied linguist is free to take an eclectic line and to draw whatever insights he can from a range of descriptive models.

I have said that the above diagrams represent alternative ways of delimiting the domain of applied linguistics. My original intentions in this research implied recognizing that of Diagram II and following the kind of procedures exemplified in the work of Leech (1966), Crystal and Davy (1969), Huddleston *et al.* (1968). The work would in fact have been an extension of my own very tentative efforts in the application of Hallidaian grammar to the analysis of textual material in Widdowson (1965). For the reasons already given, and which I shall be considering in more detail later (Chapter 3), it became apparent that this was not a very profitable line to take. The results from the works cited above brought little light

to bear on the nature of the “registers” investigated as types of communication. Whatever insights they may have provided for the linguist, they provided few for the language teacher to use in the preparation of teaching materials which would impart to learners the language behaviour which the original data represented. In order to explain why such descriptions were so unenlightening and why it was so difficult to see how they could be “applied” one is immediately faced with the necessity of enquiring more closely into the linguistic theory which informs them. If this particular model does not yield a satisfactory characterization, then what is it that is lacking, and what other model is available which will make up the deficiency? Once such questions are forced upon one’s attention then one is obliged to move into the domain of applied linguistics as represented in the first of our diagrams, to cancel an allegiance to one specific model of description and to go in search of insights elsewhere.

From this point of view, the applied linguist is not, as he is sometimes represented as being, simply a retailer of linguistic products. His task is to explore the pedagogic possibilities of linguistic theory and by drawing on his experience of language teaching to exploit them for the production of materials. In a way the very term “applied linguistics” is misleading since it suggests that its scope is determined by the findings of theoretical linguistics and that the relationship between the two areas of activity is the same as that between, say, pure and applied mathematics. The second of the diagrams above does imply such a relationship. The first, however, represents applied linguistics as being a kind of prospecting operation in which a search is made among theoretical notions for those which have a potential which can be exploited for language teaching purposes. From this point of view it is preferable to think of it as the speculative arm of language teaching rather than as the practical arm of linguistics.

1.4. The approach taken in this study

It is with reference to Diagram I above, then, that this study is presented as an exercise in applied linguistics. As such it is concerned with the search within linguistic theory for ideas and procedures which can be used to develop an approach to the analysis of discourse which will serve as a guide for the preparation of language teaching materials, in particular for the type of specialist learner referred to earlier. I shall inevitably be concerned with theoretical issues in my search for relevant insights and I shall be investigating the potential of existing approaches to the analysis of language use as a preliminary to suggesting one which promises to provide more satisfactorily for the needs of language teaching. The approach that I shall propose will only be sketched in broad outline: what limits its further development in this study is not only the restriction of time and my own capability but also the applied linguistic requirement that theoretical notions should be shown to have relevance to the business of language teaching. Rather than develop the approach as a descriptive exercise and risk losing sight of its ultimate pedagogic use I have preferred to show how the informing orientation to language which lies behind it – the insights upon which it is based – can lead to a development of teaching materials. In other words, instead of moving from A to

B in Diagram I, I have moved from A to C, though I would hope that there is enough in A to suggest that a description can be developed from it. It is the relating of A to C that makes this an applied linguistic approach to discourse analysis. As mentioned earlier I believe that teaching material can be developed from linguistic insights directly: they might be said to represent some kind of alternative output to the description of the linguist – an output which depends also of course on pedagogic experience and expertise. Further, I believe that the applied linguist is just as much concerned with this as with what might appear to be the more lofty task of linguistic investigation: indeed the two tasks are interdependent in applied linguistics since otherwise we should have linguistics with no relevance and materials with no insights.

It might be objected that in adopting the orientation to applied linguistics that I do I have moved from a well-defined area of enquiry as mapped out for example in Halliday, McIntosh and Stevens (1964), into an uncharted area of speculation. The answer to this is that I believe it is the business of the applied linguist to be speculative. The line I shall be taking in what follows is this: existing ways of looking at language do not appear to provide the language teacher with the kind of insights he needs to guide him in the preparation of materials for the teaching of English as communication. My own experience and that of others convinces me that what is needed for the teaching of English in the context of ESP and EST is an emphasis on just these communicative properties of language which linguistic descriptions on the whole do not capture. This being so I should like to suggest an approach to the analysis of discourse which does take such properties into account and at the same time strikes me as being potentially productive from the teaching point of view. The approach is speculative but we can see what kind of teaching materials it might yield. My experience tells me that the materials have possibilities but they too are speculative: they have yet to be tried out extensively in the classroom. Here the language teacher takes over since all materials must be subject to modification according to particular classroom circumstances.

What follows, then, is intended to be an exercise in what might be called speculative language teaching pedagogy. It will involve first of all an enquiry into the basic principles of grammatical description, to establish its scope and to find out to what extent such principles limit the relevance of grammatical description to the analysis of discourse and, by implication, to the preparation of materials which aim to teach people how to handle discourse in English. This will be the subject of the next chapter. Following this will be a survey of attempts to extend the scope of grammar to account for features of language use, which will occupy Chapters 3 and 4. These first three chapters are intended to clear the ground for those that follow. Chapter 5 now introduces the distinction between text and discourse upon which the approach to discourse analysis being proposed is based. Chapter 6 links up with Chapter 1 and gives reasons why discourse as defined in Chapter 5 cannot be brought within the bounds of grammatical description, and Chapters 7, 8 and 9 suggest an alternative way of accounting for it. The final chap-

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ter presents examples of the kind of teaching material which might be developed from the approach to discourse analysis previously outlined.

CHAPTER 2

THE SCOPE AND APPLICATION OF GRAMMAR

2.1. The content of grammar and language teaching

Traditionally the language teacher has taken the grammarian's representation of language as his principal reference and it has been generally assumed that the content of language teaching is to be drawn from the grammatical description of the language to be taught. The assumption has been that teaching a language means essentially the teaching of its underlying system, and since it is precisely this that the grammarian sets out to describe it would seem obvious that it is a grammatical description which should serve as the source of what might be called the "subject-matter" of a language course. This does not mean that the grammar is to be taught directly, nor that the way it is presented should conform to any particular model of description: subject matter in this, as in any other subject, has to be modified in accordance with pedagogic requirements. But this does not alter the fact that the subject matter of language teaching can generally speaking be ultimately traced back to a grammatical source: the language teacher deals in items provided by a grammar. It is for this reason that Saporta, for example, is able to refer to language teaching materials as a whole as "pedagogic grammar" (Saporta 1967). This being the case, it is clearly of importance to establish the principles upon which a grammatical description is based. What we want to know is what aspects of language-as-a-whole can be accounted for within a grammar and whether these aspects are those which also satisfactorily represent the subject-matter, or content, of language teaching. I have said that a grammar describes the system of a language. What exactly is meant by "system" here, and how does the linguist abstract it from the total phenomena of language-as-a-whole? These are of course questions which relate to the basic first principles of linguistic description. They are relevant to the present discussion because they also relate to one of the basic first principles of language teaching: the definition of what aspects of language are to be taught. If it turns out that the scope of linguistic description is in principle limited to the extent of having to exclude aspects which the teacher must deal with to meet the demands of his pedagogic brief, then obviously he has to extend his range of reference beyond such a description.

The first problem facing the linguist is the familiar one of deciding where to begin. Confronted with the phenomenon of language in all its immediacy and complexity he has to devise some way of isolating those features which appear to him to be the most significant, and the most amenable to systematic enquiry. There are two different criteria here, though the difference is not always recognized: what is significant is not always amenable to enquiry and what lends itself to a systematic account is not always particularly significant. This distinction between what we might call ontological as opposed to heuristic criteria has important implications and I shall return to it presently.

2.2. *Langue and parole*

De Saussure was of course the first to give an explicit account of the problem. Human language he pointed out is a complex of a number of dualities: it is both vocally produced and acoustically received; both sound and the functional organization of sound; it has both a social and an individual aspect; it is both an established system and an evolutionary process. If one focuses on one of these features, one is in danger of losing sight of the others; if one attempts to be comprehensive, one is in danger of getting lost among “un amas confus de choses hétéroclites”. Furthermore, and this is a point which relates to the distinction between criteria mentioned above, whether one takes the narrow or the broad approach to language one is likely to get involved with other areas of enquiry like psychology and anthropology: one would no longer be involved in linguistics as an autonomous discipline.

The solution that de Saussure offers takes the form of his famous distinction between *langue* and *parole*. This, according to Lyons, “is intended to eliminate an ambiguity in the use of the word ‘language’” (Lyons 1968: 51). The ambiguity lies in the fact that the term can be used to refer both to a potential ability and to its actual realizations as behaviour. But it is not quite as simple as this. For de Saussure *langue* is a norm underlying “toutes les autres manifestations du langage”, a homogeneous unity at the centre of the confusing heap of heterogeneous things which constitutes *langage*. But this *langage* is described also in terms of different dualities so that one might expect that if *langue* is a norm underlying all the other manifestations of language-as-a-whole, then it should underlie each side of each of the dualities. This, however, is clearly not the case. With regard to the social/individual duality, for example, *langue* is associated solely with the former:

C’est à la fois un produit social de la faculté du langage et un ensemble de conventions nécessaires, adoptées par le corps social pour permettre l’exercice de cette faculté chez les individus. (de Saussure 1955: 24)

The individual aspect of *langage* is accounted for by *parole*. Again, *langue* is represented as stable so that it cannot be associated with evolutionary process but only with the established system in the system/process duality. In view of this, it is difficult to see how *langue* can be the norm of all the other manifestations of *langage*. It may be said to underlie some aspects of language, but others it leaves out of account altogether.

What is left out of account is covered by *parole*. This is represented as itself a duality: on the one hand it is the executive aspect of language and on the other the speaker’s essentially idiosyncratic use of the communal conventions which constitute *langue*. That is to say it covers both the individual’s personal selection from the stock of linguistic elements at his disposal and the substantial realization of this selection as a string of sounds. As de Saussure puts it :

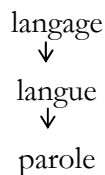
La parole est ... un acte individuel de volonté et d’intelligence, dans lequel il convient de distinguer: 1 les combinaisons par lesquelles le sujet parlant utilise le code de la langue en vue d’exprimer sa pensée personnelle; 2 le mécanisme psycho-physique qui lui permet d’extérioriser ces combinaisons. (de Saussure 1955: 31)

It would appear that while the distinction which de Saussure makes eliminates one ambiguity, it only does so by creating others. The term *parole* has two senses, *parole 1* and *parole 2* in the quotation cited above, and as we shall see later, this has led to considerable confusion, particularly in respect to the distinction between sentence and utterance.

Meanwhile, there is another important point to be noted. It has sometimes been supposed that de Saussure's two terms cover between them all the aspects of language-as-a-whole by dividing them up into two categories of phenomena of, as it were, equal status, so that de Saussure's distinction might be represented in the following way:



But as we have already noted, de Saussure conceives of *langue* as a norm underlying all aspects of language, and the quotation cited above makes it clear that *parole* is dependent on *langue*. Thus the relationship between the three concepts would seem to be something like the following:



It would appear then that *parole* is to be considered not as referring directly to aspects of *langage* but to aspects of *langue*. It is, as it were, a projection of *langue*, either as the individual's idiosyncratic use of its resources, which we might call *realization*, or as the physical representation of this use, which we might call *manifestation*, the former being *parole 1* and the latter being *parole 2*. Now what is realized as individual use must be the common stock of linguistic elements shared by the social group, or the code, but what is manifested cannot be the code but only the individual's use of it. Thus *parole 2* cannot be directly related to *langue* if by this term is meant the common code but only to *parole 1*: or if *parole 2* is directly related to *langue*, then it must be a different kind of *langue* from that which underlies *parole 1*. In other words, the situation must either be that as represented in Diagram I below, or as represented in Diagram II: it cannot be both:

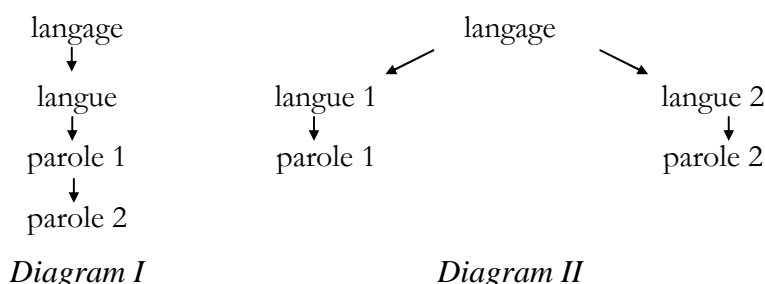


Diagram I

Diagram II

2.2.1. The de Saussurean paradox

This difficulty in establishing the relationship between de Saussure's three basic notions has not of course passed unnoticed. Thus Hockett points out:

Wittingly or unwittingly, Saussure has packed two intersecting contrasts into his single pair of terms: some of the time *langue* means 'habit' while *parole* means 'behaviour', but at other times *langue* means 'social norm' while *parole* means 'individual custom'.
(Hockett 1968: 15)

Here "behaviour" would presumably correspond with de Saussure's *parole 2* and "individual custom" with his *parole 1*; and "habit" would correspond then with *langue 2* and "social norm" with *langue 1*. It is clear from all this that, whatever de Saussure's intentions may have been, the distinction he makes does not provide a simple resolution of the ambiguity which Lyons refers to. Not only is each of the terms itself ambiguous, as Hockett points out, but the ambiguity can in fact lead to the disappearance of the basic distinction between them. This is pointed out in Householder in his review of the book from which the quotation given above is taken:

Hockett remarks quite correctly, as others have too, on the Saussurean confusion of two possible contrasts in the *langue-parole* distinction. He puts it a little differently than I would: contrast a) makes *LANGUE* mean 'habit' and *PAROLE* 'behaviour', b) makes *LANGUE* equivalent to 'social norm' and *PAROLE* to 'individual custom'. I would tend to say rather that a) equates *LANGUE* with 'grammar' (i.e. 'competence grammar') or 'system' or 'structure' while *PAROLE* is 'utterance' or 'performance', while b) says *LANGUE* is the 'common grammatical core' of a social group, while *PAROLE* is the 'idiolect' or 'individual grammar'. *Thus what is LANGUE under a) may be PAROLE under b).* Of course there may be social groups of many sizes, so that in the b) sense *PAROLE* is the *LANGUE* of a social group of one (if the limiting case is allowed).

(Householder 1970; my emphasis)

But, as the historical sketch in Hockett (1968) suggests, these difficulties in giving an exact delimitation to the basic concepts of de Saussure were glossed over. The assumption was carried over from the *Cours de Linguistique Générale* that there was a stable and homogeneous system to which all other aspects of language could be ultimately related. This being so, the individual's own characteristic use of language was assumed to be an inevitable reflection of the common

social norm which constituted *langue*. In other words, habit could not be but social: what was regular and habitual and therefore systematic in an individual's language behaviour must exemplify the social contract represented by the common language system. Thus it came about that linguists believed they could study the common system of language, *langue*, by investigating the regularities revealed by the *parole* of a single individual, often the linguist himself. Hence we arrive at what Labov calls the Saussurean paradox:

The social aspect of language is studied by observing any one individual, but the individual aspect only by observing language in its social context.

(Labov 1970: 32)

2.2.2. *The downgrading of parole/performance*

The notion that the common system can be derived from a study of individual behaviour is of course carried over into Chomsky's competence / performance distinction. Although the assumption is not expressed in the same terms, the idea is that, to use a de Saussure analogy, since every individual has a copy of the communal system as a reference book in accordance with which he acts, then it does not matter which individual you study: the system will inevitably emerge through the individual's use of it. In fact, Chomsky takes the argument a step further: you do not even have to study actual use, since this is merely the manifestation of something already known. All one has to do is to study the linguist's own intuitions since these are bound to be representative of those of the whole speech community sharing the common system.

Related to this notion is the basic assumption that it is this system, this *langue*, this competence, which underlies all other aspects of language-as-a-whole, which is the elemental essence of human language from which everything else is created. As we have seen, de Saussure speaks of *langue* as a norm underlying all other manifestations of *langage* so that the business of the linguist is to get through to this norm, this "objet bien défini dans l'ensemble hétéroclite des faits du langage". *Parole* represents aspects of language which are peripheral and which conceal the essential underlying system. Chomsky takes the same line. It is linguistic competence which represents the really essential facts and everything which does not bear upon the language-user's knowledge of the system of his language is relegated to the status of performance. It is not only that features of 'performance' are represented as of peripheral interest to the grammarian, but they tend to be represented as of peripheral importance among the phenomena of language as a whole. I shall return to this point presently.

There are two reasons why performance phenomena should be so slightly regarded by Chomsky and his associates. The first of these lies in the assumption they share with de Saussure that the underlying system informs all other aspects of language. It follows from this that only when the system has been accounted for can there be any reasonable hope of dealing with performance phenomena which represent a kind of psychological and sociological distortion of the facts. Everything really essential about performance, it is implied, can be accounted for as competence: this, like *langue*, is the norm underlying "toutes les autres manifesta-

tions du langage". The second reason relates to the belief, mentioned above, that the system of the language is accessible through individual intuition. What this amounts to in fact is a belief that competence is open to direct investigation and is not discovered by a consideration of actual language behaviour. Hence performance is seen not only as peripheral to the ultimate aim of linguistic description but also as irrelevant to the means of achieving it.

What underlies both the *langue/parole* and the competence/performance distinctions is the belief that the essential nature of human language is to be found in its formal properties. *Parole* and performance are not the principal concern because they represent only a partial and imperfect reflection of an underlying system of formal relations. This is brought out particularly clearly in Chomsky's references to performance. Consider, for example, the following:

Linguistic theory is concerned primarily with an ideal speaker-listener, in a completely homogeneous speech-community, who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance. (Chomsky 1965: 3)

Performance is seen as the vagaries of individual behaviour which prevent the emergence of the underlying system. Again:

A record of natural speech will show numerous false starts, deviations from rules, changes of plan in mid-course, and so on. The problem for the linguist, as well as for the child learning the language, is to determine from the data of performance the underlying system of rules that has been mastered by the speaker-hearer and that he puts to use in actual performance. (Chomsky 1965: 4)

2.3. The distinction between use and usage

Just as *parole* is defined as an aspect of *langue* and not of *langage*, so performance is defined as an aspect of competence and not of the total phenomenon of human language. There is no suggestion that the use of language might have something to do with communication, with the mediation of social relations, with doing something other than exemplifying the language system. When one speaks of *using* the rules of a language one can mean one of two things: one can mean how one exemplifies the rules as such, or one can mean how one makes use of the rules to perform social actions of different kinds. The notion of performance as expressed in the foregoing quotations refers only to use in the first of these senses. But it is very easy, as we have seen in our discussion of the notion of *langue*, to conflate two quite distinct concepts into one term and to assume that when speaking of one, one necessarily includes the other. The term *use* is of course notorious in this respect (see for example Strawson 1950/1968; Alston 1963, etc.) and has provided substance for philosophical discussion for decades. In view of this it will be as well to make a terminological distinction between the two senses of the term which I have tried to distinguish here. We might refer to performance in the Chomskyan sense of exemplification of linguistic rules as *us-*

age, reserving the term *use* to mean the manner in which these rules are drawn upon to perform social acts. Thus, to put the matter in simple terms, a sentence is an instance of usage in so far as it is discoverable in an utterance, but in so far as that utterance makes a statement of a particular kind it is an instance of use.

As I have said, it is easy to suppose that one is referring to use when one is in fact referring to usage. Generative grammarians seem particularly prone to this. In the introduction to Katz and Postal (1964), for example, we find the following statement:

A linguistic description of a natural language is an attempt to reveal the nature of a fluent speaker's mastery of that language. This mastery is manifested in the speaker's ability to communicate with other speakers of the language: to produce appropriate sentences that convey information, ask questions, give commands, etc., and to understand the sentences of other speakers. Thus a linguistic description must reconstruct the principles underlying the ability of speakers to communicate with one another. Such a reconstruction is a scientific theory whose statements represent the linguistic structure characteristic of the language and whose deductive consequences enable the linguist to explain sentence use and comprehension in terms of features of this structure.

(Katz and Postal 1964: 1)

What one has to notice here is that the ability of the speaker to produce appropriate sentences in the performance of acts of communication is assumed to be the same thing as his knowledge of linguistic structure: it is a theory of the underlying system which accounts solely for how speakers use their language to communicate. In fact, all that such a theory can account for is usage. This is clear when we consider what features of language-as-a-whole are excluded by fiat from what such a theory is to account for. In a footnote to the above paragraph, Katz and Postal add:

We exclude aspects of sentence use and comprehension that are not explicable through the postulation of a generative mechanism as the reconstruction of the speaker's ability to produce and understand sentences. In other words, we exclude conceptual features such as the physical and sociological settings of utterances, attitudes, and beliefs of the speaker and hearer, perceptual and memory limitations, noise level of the settings, etc.

(Katz and Postal 1964: 4)

It would be interesting to know what further exclusions this *etc.* is intended to cover. But those which are mentioned in this quotation suffice to make it clear that what is being excluded from consideration are factors which have a direct bearing on use, in the sense defined above: factors like the role of speaker and listener as addresser and addressee and the situational context of the utterance. No theory that leaves such factors out of account can possibly provide an explanation of how language users produce sentences which are appropriate as acts of communication. In other words, it cannot account for use, but only for usage.

The assumption that everything that is of real significance about human language can be captured in a description of its underlying system has of course come under attack in recent years. Hymes, for example, points out that in genera-

tive discussions of performance “the note persistently struck is one of limitation, if not disability”, and adds that:

... “performance” is something of a residual category for the theory, clearly its most salient connotation is that of imperfect manifestation, of the underlying system, even, raw behaviour. (Hymes 1970: 4-5)

As we have seen, Katz and Postal suppose that the ability to produce appropriate sentences which will function as statements, questions, commands, and so on is simply an automatic consequence of learning the language system. In contrast to this, Hymes argues that a knowledge of the system and a knowledge of how to use it are distinct:

a normal child acquires knowledge not only of grammatical sentences, but also of appropriate ones. He or she acquires competence as to when to speak, when not, and as to what to talk about with whom, when, and where, in what manner. (Hymes 1970: 13-14)

Furthermore, and more importantly, this competence in dealing with appropriacy as opposed to correctness – with the functional aspects, as opposed to the formal aspects, of sentences – has to do with the very social factors which Katz and Postal exclude from consideration. A knowledge of how to use language to communicate would only derive directly from a knowledge of how to form sentences if they were an exact correspondence between linguistic forms and communicative functions. Katz and Postal’s remarks seem to imply such a correspondence. But as Hymes observes:

What is grammatically the same sentence may be an instruction or a request; what are grammatically two different sentences may as acts both be requests. One can study the level of speech acts in terms of the conditions under which sentences can be taken as alternative types of act, and in terms of the conditions under which types of act can be realized as alternative types of sentence. (Hymes 1970: 15)

These conditions, again, have to do with the circumstances of language use which the generative linguist has tended to dismiss as merely performance phenomena and to put beyond the pale of his concern.

The need to study language in its social context and to allow “performance phenomena” within the scope of linguistic study is also stressed in Labov (1970). While granting that the isolation of *langue* or competence has yielded impressive results, Labov feels that the essential nature of language as a means of social communication has been neglected:

... it is difficult to avoid the common-sense conclusion that the object of linguistics must ultimately be the instrument of communication used by the speech community; and if we are not talking about *that* language, there is something trivial in our proceeding. (Labov 1970: 33)

2.4. Ontological and heuristic validity

What both Hymes and Labov are in fact advocating is a restoration of *langage* as the principal object of linguistic attention in place of *langue*. Their argument is

that a concentration on the latter is, to use the terms introduced earlier, neither ontologically nor heuristically valid. It is not ontologically valid because it misses the essential nature of language as a social phenomenon; and it is not heuristically valid because it is not possible to discover a system which de Saussure calls homogeneous and Chomsky calls well-defined either within the data of *parole* or within the intuitions of a representative member of the speech community. As Labov points out, the linguist's concentration on the underlying system presupposes two assumptions:

1. ... that linguistic theories can be fully developed on the basis of that portion of language behaviour which is uniform and homogeneous; though language variation may be important from a practical or applied viewpoint, such data is not required for linguistic theory – and in fact will be best understood when the theory of competence is fully developed.
 2. Speakers of the language have access to their intuitions about *langue* or competence, and can report them.
- (Labov 1970: 33)

The first of these assumptions relates principally to what I have called ontological validity and has to do with whether a linguistic description which restricts itself in this way can account for the basic facts of human language. The second assumption relates to the heuristic question as to whether it is feasible to try to do so.

We make contact here with an issue which is not only important for linguistic theory but which has implications for the relationship between linguistics and language teaching. There seems to be no reason, in principle, why the linguist should not define his discipline in such a way as to exclude certain aspects of language which other people might consider of paramount importance. Jakobson defines the linguist's area of enquiry very broadly:

Linguistics is concerned with language in all its aspects – language in operation, language in drift, language in the nascent state, and language in dissolution.

(Jakobson and Halle 1956: 55)

Commenting on this, Allen makes the point that it is open to objection on the grounds that:

... the adoption of so diffuse a definition of linguistics runs the risk of precluding any unified theory, such as would justify its status as a subject, rather than an ill-defined field of activities connected with language.

(Allen 1966: 7)

This, of course, is precisely the point made by de Saussure: an attempt to deal with language in all its diffuseness is only likely to result in confusion.

2.4.1. *Extraction and abstraction of data*

But the question arises: is the process of delimiting what the linguist is to deal with informed by the total phenomena to be accounted for or by the need to define the subject area of linguistics. That is to say, confronted with language in all its aspects, does the linguist *abstract* those which appear to be essential to the nature of language or does he *extract* those which appeal to his particular interest

and which seem likely to prove amenable to the techniques of analysis he has at his disposal. It is not clear whether de Saussure intends his notion of *langue* to be an *abstraction* or an *extraction*. On the one hand, as we have seen, he presents it as a norm for all other aspects of language, but on the other hand he presents it as accounting for only some of them: the social and not the individual aspect; the invariant and not the variable aspect, and so on. Now if it is meant as an abstraction, then it is part of a definition of language. But if it is meant as an extraction, then it is part of a definition of linguistics. Sometimes de Saussure represents it as a defining feature of language, as in statements like: “elle est un objet bien défini dans l’ensemble hétéroclite des faits du langage”; and sometimes he represents it as a defining feature of linguistics as in statements like: “la langue est un tout en soi et un principe de classification”.

The same difficulty occurs with the competence/performance distinction. If competence is meant to refer to an extraction from all the facts of language, then it defines the nature of linguistics, in the sense that it represents its subject matter. Then a description of a language simply means its grammar, in the more general sense of this term made familiar by the generative grammarians. In this case we might agree with Lees that it is unreasonable to expect a grammar to deal with any other aspects of language (though Lees appears to be using the term “grammar” in the narrower sense which excludes semantics):

I suppose we mean to say, roughly, that a grammar describes how the correctly constructed utterances of a language are put together. It seems unreasonable to demand further that a grammar also specify what these utterances mean, where, when, and by whom they may correctly be used, how often they are likely to occur, which of them comprise texts or discourses of various kinds, exactly how a speaker produces a sentence he chooses, or how a listener reconstructs his understanding of a speaker’s intent.

(Lees 1963: xix-xx)

But unreasonable or not, linguists have made further demands and have attempted to extend the scope of grammars to cover the meaning of utterances and the manner in which they combine in discourse. The fact that the terms “sentence” and “utterance” seem to be in free variation in the quotation cited might be said to be an indication of the difficulty of keeping the system distinct from its use, of maintaining the lines of delimitation.

The reason why attempts have been made to extend the scope of grammar lies in the fact that competence was not conceived of simply as an extraction. It was also represented as an abstraction and therefore as in some sense defining the nature of language. It is for this reason that the notion has been criticized by Hymes, Labov and others, and why it has recently been redefined as “communicative competence” (Hymes 1970; Campbell and Wales 1970; Lyons 1972), which represents what is now thought to be a more satisfactory abstraction. The danger of course is that in consequence the lines delimiting the subject might disappear. Certainly linguistics has now become implicated in philosophy and sociology and no longer remains within the autonomous reservation staked out for it by de Saussure. Perhaps this does not matter since linguistics has since de Saussure been

granted the kind of recognition he sought for it. What does matter however is whether, in Allen's phrase, this more comprehensive view of the subject matter of linguistics precludes a unified theory, whether an extension of scope can only be achieved at the expense of clarity and precision. This question will be considered in detail in a later chapter.

2.4.2. *Applied linguistic implications*

Meanwhile we must consider what implications the foregoing discussion has for applied linguistics. As was pointed out in 2.1. above, it has generally been assumed that the content of language teaching as a subject is of the same nature as the content of linguistics as a discipline, that what the linguist describes is what the teacher must teach. Such an assumption underlies the discussion on methodology in Halliday *et al.* (1964), Wardhaugh (1970) and others, and is put into pedagogic practice in the work of Roberts (1956, 1962, 1964), Rutherford (1968) and others. Thus it has been assumed that the ultimate aim of language teaching is to develop in the learners a knowledge of *langue*. We might take the following as a representative statement:

The ultimate purpose of teaching is to lead the learner to see the abstract *langue* system behind the examples of *parole* which are set before him. This system is the dynamo, so to speak, which will power his own performance in the language. There are many ways of drawing the pupil's attention to features of the *langue* system, some more overt and conscious than others, but there is no doubt that our goal must be to develop in the learner a confident manipulation of the *langue* system so that he may understand what is said to him in English and make himself understood.

(Howatt 1968: 6)

But if *langue* is, as has been suggested, an extraction which excludes aspects of language associated with use, then an ability to manipulate it does not provide the learner automatically with the ability to make use of language – either to understand what is said or to be understood by others – in its normal function as, in Labov's phrase, “the instrument of communication used by the speech community”. The acquisition of the system will serve as a dynamo to power performance only in the sense of usage and not in the sense of use.

If the linguistics which the applied linguist is to exploit for language teaching purposes is restricted to a consideration of the underlying system, then clearly the insights which it yields will only relate to this system. If, as Hymes, Labov and others have suggested, a knowledge of the system is only a part of what the user of a language needs to know, that competence in the Chomskyan sense is only one element within communicative competence as a whole, then it is obvious that the linguist's traditional subject matter cannot be the subject matter of language teaching. The language teacher must ultimately be concerned with developing in his learners an ability to handle language as an instrument of communication. The kind of insights which will help him to do this, and which it is the business of the applied linguist to discover and develop, will be those which relate therefore to the nature of language as an instrument of communication. Hymes makes the point that “there are rules of use without which the rules of grammar would be

useless" (Hymes 1970: 14). If this is so, then it is clearly the business of the language teacher to teach them, and clearly the business of the applied linguist to help him to do so.

It is important to stress, however, that it is not being suggested that the teaching of *langue* or grammatical competence should be abandoned in favour of the teaching of communicative competence. Just as both Hymes and Labov are careful to point out that the study of language in its social context must be seen as a development from the study of the language system and not an alternative to it, so we must be careful to recognize that the teaching of system still has an important place in the teaching of language. What is being suggested is that it does not represent the *goal* of language teaching but only one of the means by which such a goal might be achieved when linked with the teaching of other aspects of language-as-a-whole: it is part of the total task but not the whole of it.

If the subject matter of language teaching is to be *langage* rather than *langue*, use rather than usage, then our first task is to survey the attempts that have been made to deal with those aspects of language which a description of *langue* or competence leaves out of account. To provide a framework for this survey it will be useful to distinguish different stages in the process whereby the linguist separates out from de Saussure's "amas confus des choses hétéroclites", the raw data of *langage*, those features which he wishes to study. As has frequently been pointed out, and as is evident from the quotation from Katz and Postal (1964) cited earlier (2.3.), the factors which are represented as effecting performance are a very diverse collection of phenomena indeed and include speech defects, state of health, degree of sobriety, memory limitations, social class, circumstances of utterance and many more. It is however possible to introduce some order into this gallimaufry of factors.

2.5. Levels of idealization

We may do so by invoking the notion of degrees of idealization. This notion is introduced in Lyons (1972) to show how sentences, the abstract objects of the language system, can be related to utterances, the concrete objects of language behaviour. First of all, the linguist disregards such phenomena as slips of the tongue, hesitations, repetitions, self-editings, and so on, which are such a prominent feature of spoken discourse (see Dixon 1965; Quirk 1962). Performance "noise" of this kind can legitimately be thought of as a kind of distortion of the data. Following Lyons we can call the process whereby this is filtered out as *regularization*. It should be noted, however, that although the linguist may wish to discount phenomena of this kind as interference, it does not follow that they are insignificant in any absolute sense, nor that they are random and beyond the scope of systematic study. On the contrary, it may be precisely these aspects of language behaviour that are of principal interest for the psycholinguistic study of performance. Commenting on the tendency of the generative grammarian, and in particular of Chomsky, to stigmatize such performance phenomena as random, Hockett (1968) points out self-editing, for example, is a regular feature of discourse. Matthews (1967) similarly points to the rule-governed nature of hesitation

and a systematic study of slips of the tongue appears in Boomer and Laver (1968). The point is, then, that regularization should be regarded as a means of removing from consideration features of language which are not significant *in relation to the interest of the linguist*. The term used for the process should not mislead us into thinking that everything that is removed is irregular in any absolute sense. This point, which must also be made in connection with the other degrees of idealization, is worth emphasizing because, as has been pointed out earlier, the language teacher has not always recognized the essentially relative nature of idealization and has been apt to assume too readily that the linguist's area of concern must necessarily also be his own.

Regularization eliminates features of language use which are not in fact the concern of this study either, so that in what follows this degree of idealization will be retained. Such features are likely to be of relevance to that aspect of the relationship between linguistics and language teaching which, as we saw in the previous chapter (1.3.), Wilkins refers to as "implication" and which, as was pointed out there, does not fall within the scope of the present discussion. The other two degrees of idealization which Lyons mentions, on the other hand, have a direct bearing on our theme. These are *standardization* and *decontextualization*. Whereas regularization might be said to separate out from the data matters which are principally of psycholinguistic interest, standardization and decontextualization might be said to separate out matters which are principally of sociolinguistic interest.

2.5.1. Standardization

Standardization involves disregarding language variation. De Saussure of course achieves this by setting up his synchrony/diachrony distinction and by associating *langue* solely with the former. Since linguistic change over time is a function of linguistic variation existing at any one time, the acceptance of a synchronic perspective commits the linguist to a consideration of language as a static system, a homogeneous norm. Speaking for linguists who followed the Bloomfieldian tradition in the United States, Hockett points out:

In our synchronic work, we accepted without question the Saussurean-Bloomfieldian characterization of a language as a 'rigid' system, and sought to match its rigidity with our rigor. We ignored the whole problem of the implications for language design of the fact of linguistic change, and vice versa.
(Hockett 1968: 31)

Hockett now believes that to ignore the facts of variation by treating language as if it were a homogeneous system is a serious mistake which has the effect of distorting the true nature of human language. As we have seen earlier in this chapter, Hockett is not alone in this belief, and indeed it is obvious that by leaving variation out of account, the linguist is ignoring something of quite fundamental importance. His justification is, of course, that by such an omission he is able to study other features of language with greater exhaustiveness and precision. There is no such thing as a homogeneous speech community, but this does not mean that advances in the understanding of language cannot be made by pretending

that there is. The notion of standardization is used to define linguistics and not language. This point is worth stressing again because it seems to me that linguists “wittingly or unwittingly” (to use Hockett’s phrase) have sometimes confused this distinction. Thus Firth attacks de Saussure’s notion of *langue* on the grounds that it represents a bad definition of language (Firth 1957: 180), and it is the fact that it depends on a disregard for linguistic variation that Firth seems to find more unpalatable:

The multiplicity of social roles we have to play as members of a race, nation, class, family, school, club, as sons, brothers, lovers, fathers, workers, church-goers, golfers, newspaper readers, public speakers, involves also a certain degree of linguistic specialization. Unity is the last concept that should be applied to language. Unity of language is the most fugitive of all unities, whether it be historical, geographical, national, or personal. There is no such thing as *une langue* and there never has been. (Firth 1957: 29)

As an attack on the notion of *langue* as an abstraction and thus as in some sense a definition of language, this is justified. But de Saussure is applying the concept of unity to *langue* and not to *langage*, and if this is understood as an extraction, an idealization which serves to define linguistics, then the attack loses its point. One is tempted to suggest that it is because Firth finds it so difficult to accept the necessity of idealization of this kind that his own writing is so lacking in clarity.

Firth’s attack on de Saussure’s notion of unity is comparable to Hockett’s attack on Chomsky’s notion of “well-definition” (Hockett 1968). In both cases the attack might be said to be provoked by the equivocal status of the notion concerned. Hockett’s point is that language is of its nature ill-defined and consequently cannot be accounted for in terms of a well-defined system.

Since languages are ill-defined, mathematical linguistics in the form of algebraic grammar is mistaken. (Hockett 1968: 61)

It is indeed mistaken if the claim is that it can capture in the form of an abstraction all the significant features of human language, but this does not prevent it being able to further our knowledge of certain of its aspects by operating in terms of a useful extraction. Hockett considers this possibility only to reject it: Chomsky’s approach may “achieve a practically useful approximation”:

This may be so if one’s concern is, say, the programming of computers for the helpful manipulation of language data. But an approximation is always made possible by leaving some things out of account, and I believe the things left out of account in order to achieve an approximation of this particular sort *are just the most important properties of human language*, in that they are the source of its openness. (Hockett 1968: 62)

But of course, as Hockett himself here acknowledges, the fact that certain properties are left out of account does not prevent the approximation which Chomsky’s approach represents being useful and indeed necessary for certain purposes. One such purpose might be the description of the mathematical properties of language which enables computer programmes to be designed, and to get

at such properties it might well be necessary to leave others, which for this purpose are of less importance because they are of less concern, out of account. However one idealizes data, and idealization must be a necessary preliminary to any investigation, one is bound to leave out something which an investigator with a different orientation will regard as important. It should be pointed out, for example, that Hockett does not object to regularization so strongly, but for a psycholinguist or psychiatrist this may remove from consideration just those features of language use which are of primary importance. But of course this does not mean that the linguist is not justified in imposing this degree of idealization. As Lyons points out:

At this first stage of idealisation, Chomsky's distinction of 'competence' and 'performance' is helpful, and, as far as I am aware, is not seriously questioned by any linguists. There are of course practical difficulties involved in identifying errors, but the principle is not in doubt. (Lyons 1972: 58)

It should perhaps be pointed out, in partial extenuation of Hockett, that Chomsky himself is apt to forget the idealization upon which his description is based and to confuse the definition of language with the definition of (his) linguistics. One instance of this is the use he makes of the notion of "systematic ambiguity" which enables him to refer to "the native speaker's internally represented 'theory of language'" as if this were the same thing as the linguist's grammatical description, thus in effect equating knowledge of a language with a linguistic theory. As is pointed out in Matthews (1967), this leads Chomsky into developing an argument of very doubtful logical validity by means of what Hockett calls "Tarzan thinking" (Hockett 1968: 64). An ambiguity is a source of confusion, whether it is systematic or not, and as Lyons points out (Lyons 1968: 51) it is the purpose of such distinctions as *langue/parole* and competence/performance to eliminate ambiguities of this kind. Paradoxically then, as we saw previously in the case of *langue*, the establishing of competence involves Chomsky in ambiguity, which it is the purpose of the notion of competence to eliminate.

A second instance of the confusion is of particular interest because it shows Chomsky arguing in the same way as Hockett argues but in support of his approach and not in opposition to it. In other words, the same argument is used in support of opposing views. As we have seen, Hockett's rejection of algebraic grammar is based on the fact that language is ill-defined. The argument then is simply that a generative grammar of the Chomskyan kind is invalid because it represents language as a well-defined system, and language is not well-defined. But Chomsky uses precisely the same argument to reject finite-state grammar. Hockett shows that any attempt to construct an algebraic grammar for English runs into serious difficulties and complications. Chomsky makes exactly the same observation in relation to finite-state grammar:

In view of the generality of this conception of language, and its utility in such related disciplines as communication theory, it is important to inquire into the consequences of adopting this point of view in the syntactic study of some languages such as English or a formalized system of mathematics. Any attempt to construct a finite state grammar for English runs into seri-

ous difficulties and complications at the very outset, as the reader can easily convince himself. However, it is unnecessary to attempt to show this by example, in view of the following more general remark about English:
(9) English is not a finite-state language. (Chomsky 1957: 20-21)

The answer to this of course is that English is not like a “formalized system of mathematics” either, although Chomsky here implies that it is, but that this does not preclude the linguist from discovering important features of language by *assuming* that it is. Chomsky acknowledges the utility of a finite-state conception of language, just as Hockett acknowledges the utility of a mathematical conception of language, but neither recognizes that the conception can serve as the basis for a linguistic description. But just as the assumption that English, for example, is a well-defined language, like mathematics, can lead to a description which reveals certain fundamental facts about the language which computer programming can then draw upon, so the assumption, contrary to fact again, that it is a finite-state language, unlike mathematics, can lead to insights about other aspects of the language, which communication theory can draw upon.

In fact suggestions have recently been made that the finite state model of grammar is not so inadequate as Chomsky represented it as being (see, for example, Labov 1970: 40). His argument for rejecting it relied on the existence of self-embedded structures in natural language, and, as Labov points out, although single embeddings of this kind occur commonly in English, multiple self-embeddings do not appear to be attested, and since a finite state grammar will account for the former the argument for rejecting it no longer holds. Chomsky is of course somewhat blinkered by his own belief that there must be a correspondence between a natural language and a mathematical system, and since a finite state grammar will not account for the latter, then it will not account for the former either.

The fact that standardization, then, rules out of court certain features of language-as-a-whole which to many people, like Hockett, Hymes and Labov, are of crucial importance does not invalidate it as a procedure. What it may well do, however, is to restrict the relevance of the description based upon it for a particular purpose. The question to be considered in this study is how far such a description can be used in accounting for discourse, and how far, therefore, it can serve as reference for the preparation of language teaching materials which take the teaching of discourse as their ultimate aim.

2.5.2. *De-contextualization*

The third degree of idealization involves the process of *de-contextualization*. The linguist as grammarian is interested in showing how the rules and relations which constitute the system of a language are made manifest in sentences, the abstract patterns of linguistic elements which “underlie” actual utterances. Thus there are no sentences in discourse as such, but only stretches of language, constituent parts of the discourse, which can be put into correspondence with sentences. Since the principal features of the language system appear to be accountable for in terms of these abstract units, the linguist has not generally been disposed to carry his en-

quiry beyond the sentence. To do so is to get involved in context, and this involvement may take one of two forms. Firstly, since sentences never manifest themselves in isolation except in grammar books and psycholinguistic experiments but always as utterances almost always associated with other utterances in a discourse of some kind, the possibility naturally arises that there may be formal relationships between sentences just as there are formal relationships between their constituents. In other words, there may be features of the language system which are not describable within sentence limits but only within larger structural units of which sentences themselves may be constituents. De-contextualization separates sentences from utterances, which are naturally only parts of a larger communicative whole, and treats them as self-contained and isolated units. Recognition of context brings up the possibility that such units might be formally linked as part of a larger pattern, that the operation of system might range beyond the sentence limit. In this sense, contextualization involves extending the study of *langue* or competence horizontally, as it were, to a consideration of sentences in combination.

Secondly, contextualization may involve extending the study of *langue*/competence vertically, as it were, to a consideration of the relationship between sentence and utterance. Just as utterances never normally occur in isolation, so they never normally occur as simply the manifestation of sentences. They are also, and more importantly, the use of sentences, or the use of rules which sentences exemplify, to perform acts of communication of one kind or another. The communicative import of an utterance will not only depend on the formal syntactic and semantic properties of the sentence with which it corresponds but also on such contextual features as the relationship of the addresser and addressee, the social situation in which the utterance is made, and so on. Contextualization in this case involves a consideration of what sentences count as when they are used in the actual business of social interaction.

What this third stage of idealization involves then is the isolation of sentences as abstract linguistic units by disregarding any formal relations they may contract in combination and any functional relations they may have with utterances as communicative acts. Generally speaking, the linguist has been concerned only with formal relations between sentences on a paradigmatic plane, as in the establishing of a common deep structure for a variety of different surface forms; and he has been concerned only with the functional relations between linguistic elements within the structure of the sentence itself.

2.6. Extending the scope of grammar

In order to arrive at *langue*, or competence in the Chomskyan sense, the linguist has to apply all three stages of idealization. This does not mean that he does so as a conscious and systematic process: on the contrary, as we have seen, the tendency of the generative grammarians has been to bundle the different features of *langage* we have been discussing into one undifferentiated collection of “performance phenomena” often implying that they are all unworthy of systematic attention. As we have seen, the assumption (made explicit by Chomsky but under-

lying much of linguistic description since de Saussure) that the linguist must impose this degree of idealization on his data has been questioned. Recent writing, particularly in the field of sociolinguistics, has challenged both the ontological and heuristic justification for restricting the scope of linguistic description in this way. This writing represents a reaction against these assumptions in relation to generative grammar but of course there have been many linguists in the past who have believed that variation and context should be taken into account and who have attempted to extend the scope of linguistic description to do so. One can point to the work of the Prague School on “functional style” (Fried 1972) and the comparable notion of “register” developed by Halliday and his associates, and to the attempts reviewed in Hendricks (1967) to go “beyond the sentence” into *la linguistique de la parole*. There is then nothing especially novel about the recently expressed dissatisfaction with the constraints imposed upon language study by the idealization which yields *langue* or competence as the sole concern of serious linguistic enquiry. What is perhaps novel is that the explicitness required of generative grammar results in a precise statement about the assumptions upon which it is based, and obliges those who would challenge these to formulate their objections with a similar precision.

What we have to do now is to consider the different attempts that have been made to extend the scope of linguistic description by redrawing the lines of idealization in such a way as to take variation and context into account. If, as has been argued, a sentence grammar cannot serve as the sole reference for the preparation of teaching materials directed at the teaching of English use, it is obviously necessary to consider the work of those who have attempted to go beyond the sentence in our search for insights into how such materials might be devised. The two chapters which follow review this work. Chapter 3 is concerned with attempts to describe language in what we might call its non-standardized character and is a discussion of discourse at a “macro-level” at which one discerns variation of *language functions* within a speech community. At this level, discourse has to do with “varieties of language”, “registers”, “styles”, and our interest will be in discovering the pedagogic potential of these notions. Chapter 4 is concerned with attempts to describe language in its contextualized character, and here we are concerned with discourse at a “micro-level” of analysis. Our interest here is not so much in such questions as “How can we characterize technical discourse in such a way as to distinguish it from other types of discourse”, but in such questions as “How are the formal resources of the language system used in the performance of different acts of communication”. We might say that this chapter is concerned not with language functions but with *communicative functions*. It is important to stress that no absolute distinction is being made here. The two ways of approaching the study of discourse are not in conflict but are complementary, at least in principle (see Criper and Widdowson forthcoming), but it is convenient for the purposes of exposition to treat them separately.

CHAPTER 3

EXTENDING THE SCOPE: DE-STANDARDIZATION

3.1. The speech community

As we have seen (2.2.), de Saussure claimed the status of a “social fact” for his notion of a homogeneous and invariant norm underlying individual behaviour. The concept of a “social fact” derives from the sociology of Durkheim (see Di-
neen 1967: 193 *et seq.*). The social fact that other sociologists and social anthro-
pologists have emphasized is the heterogeneity and variation of language. Whereas
de Saussure sees language as structured internally as a self-contained entity, these
scholars have seen language as also structured externally and informed by the
more general patterns of social life. Standardization enables the linguist to concen-
trate on the internal patterns of a language but by relaxing this degree of idealiza-
tion one is involved in a consideration of how a language patterns in with the so-
cial structure of the community in which it is spoken. One is involved, in particu-
lar, in establishing what is meant by “a language”. By ignoring variation, the lin-
guist can take a language as given and depend upon his own intuitions and the
rules generated by his own description to define it, but when variation is taken
into account, it becomes less clear what “a language” is.

The linguist can make the simplifying assumption that a language is what is
spoken by a single speech community. But although the linguist may be untrou-
bled by the fact, this is a circular definition since a speech community can only be
defined in terms of its means of linguistic interaction. When one considers lan-
guage in its actual un-standardized character one is faced with the need to give
notions like “a language” and “a speech community” a more exact definition. De
Saussure assumes a homogeneous speech community, all of whose members
share a common code and the use they make of this code is represented as an
individual and idiosyncratic matter: there is no patterning in *parole*. Bloomfield
also equates one language with one system shared by a community: he defines
“speech community” as “A group of people who use the same system of speech-
signals” (Bloomfield 1935: 29). And Chomsky, of course, speaks of a “completely
homogeneous speech community” and of “its language” (Chomsky 1965: 3). In all
of these cases, a speech community is represented as isomorphic with a language
represented as a single code, a single system of speech-signals. But at a level of
idealization which includes variation, they can no longer be considered as “primi-
tive” or “pre-theoretical” terms (Lyons 1968: 171-2). They become fundamental
concepts which call for precise formulation (see Hymes 1964: 385-6).

From this sociolinguistic standpoint, the first difficulty in assuming an equa-
tion between a language and a speech community is that there is no obvious way
of recognizing a language as opposed to a “variety” of a language. One cannot
distinguish a regional or social dialect from a “different” language solely by refer-
ence to formal properties (see Haugen 1966). One has also to take into account
the social function of the code concerned and the attitude of the people who use
it. As is pointed out in Fishman (1971), and elsewhere, the structural affinities of

two linguistic systems may be under or over valued by the effect of such factors as the intensity of verbal interaction and feelings of symbolic integration among those who make use of them (Fishman 1971: 232 *et seq.*). Thus it is possible for two codes or linguistic systems to have close structural affinity and yet to be considered as two languages, and two codes to have much less structural affinity but to be thought of as two varieties of one language. Even such an apparently reliable measure of affinity as intelligibility cannot be relied upon (see Wolff 1959).

It is not the business of this dissertation to enter into a detailed discussion of the factors involved in identifying “a language”. What is of importance is that we should recognize that what the grammarian sees as a unitary system is in reality a complex of different forms of speech which can be formally and functionally differentiated. Whether it is preferable for the purposes of this study to treat them as different codes or as variable realizations of one code is a question which I shall take up later. Meanwhile we might note that the decision is by no means an obvious one: it will depend on what the linguist himself believes as well as such “objective” factors as structural affinity, functional differentiation, and so on.

Once one recognizes the difficulty of defining what is meant by “a language” the definition of a speech community as a group of people sharing the same system of signs, or having “a common language” ceases to be satisfactory. Instead, at this level of idealization, one is obliged to define it in terms of how groups of people interact and of the norms of social behaviour they subscribe to. As Fishman puts it:

A basic definitional property of speech communities is that they are *not* defined as communities of those who “speak the same language” (notwithstanding Bloomfield 1933), but rather, as communities set off by destiny of communication or/and by symbolic integration with respect to communicative competence *regardless of the number of languages or varieties employed*.
(Fishman 1971: 234)

To relax idealization so as to take language variation into account, then, commits us to a sociolinguistic point of view which takes as its object of concern not an arbitrarily defined system of signs but the whole range of verbal means whereby a community interacts and is integrated. The notion of speech community is no longer a pre-theoretical or pre-scientific term, in the sense of Lyons, which can be used with whatever looseness is convenient, but becomes a technical term in sociolinguistics (see Hymes 1964: 385-6). The same shift of orientation brings into focus the very aspect of variation which the notion of “a language” necessarily ignores, and the object of concern is no longer “a language” but a verbal repertoire, which Gumperz defines as:

... the totality of linguistic forms regularly employed in the course of socially significant interaction.
(Gumperz 1964: 137)

3.2. Variation within the verbal repertoire

The study of the uses to which a community puts its verbal repertoire is the principal concern of that area of socio-linguistics which is commonly referred to as the sociology of language. Interest has centred on the functional value of the dif-

ferent codes available to a community for social interaction. Studies of “code-switching” have been made in communities where the codes concerned are so structurally distinct as to be regarded as separate languages, as for example in Rubin (1962), and in communities where they are so structurally related as to be considered as varieties of one language, as, for example, in Ferguson (1959), Geertz (1960) (for a review, see Pride 1971; Gumperz and Hymes 1972). From the point of view of their social function, or the manner in which they signal social meanings, it is irrelevant whether the codes within a linguistic or verbal repertoire are “different languages” like Spanish and Guarani (Rubin 1962), or varieties of the “same language” like high, low and middle Javanese (Geertz 1960), or Egyptian and Classical Arabic, French and Haitian Creole (Ferguson 1959).

The studies that have been referred to above have dealt with situations where it is possible to establish a correlation between different linguistic codes and different social functions. Thus Ferguson, for example, is able to point to specific areas of use for his High and Low varieties:

In one set of situations only H (i.e. High) is appropriate and in another only L (i.e. Low), with the two sets overlapping only slightly.

(Ferguson 1959: 430-1)

Similarly, Rubin is able to establish distinct domains of use for Spanish and Guarani. In these cases, since the modes of speaking are formally differentiated as distinct codes there is little difficulty in recognizing when a switch occurs. But variation does not always take the form of a choice between discrete modes of speaking in this way. In principle the phenomenon whereby different linguistic forms attach to certain domains of social use is the same whether these forms belong to formally differentiable codes or are simply “stylistic variants”. As Gumperz points out:

... in some societies the shift between linguistically distinct codes may carry social meanings equivalent to the selection of stylistic alternates in others.

(Gumperz 1972)

This creates a difficult descriptive problem. Given that a verbal repertoire consists of the range of linguistic devices available to a speech community for the conveying of appropriate messages, how does one set about correlating linguistic forms with areas of appropriate use when these forms are not grouped into separate systems. To put the matter simply, where a community’s verbal repertoire can be distinguished as consisting of two formally different systems, like Guarani and Spanish, or Ferguson’s High and Low varieties, it is not difficult to make statements to the effect that Spanish is used in patient-doctor interaction and student-teacher interaction, that the High variety is used for formal speeches and sermons, and so on. Where there is no such clear formal demarcation lines within the verbal repertoire, however, one is faced with a much more difficult problem. How does one account for the variation which is intrinsic to language when this is not divided up into more or less discrete segments. One recognizes for example that the way English is used in the delivering of a sermon is different from the way it is used in a sports commentary, that “the English” of personal letters is not the

same as that of a technical manual. But are these different “varieties” of English so clear-cut as to constitute different codes? Can we speak of “legal English” or “technical English” or “the English of sermons” or “the English of sports commentaries” in the same way as we can speak of Spanish and Guarani or French and Haitian Creole? Furthermore, is it not reasonable to suppose that even within a diglossic situation each of the varieties will itself reveal variation, so that the High variety as used in, say, a political speech will have features which distinguish it from the use of that variety in a university lecture?

When one is dealing with broad patterns of language function in the context of diglossia, or societal bilingualism, one is operating at a level of idealization which avoids such problematic issues. But when one attempts to examine what is the same phenomenon on a smaller scale to distinguish less obvious patterns of use, one finds that it is far from easy to decide whether one is dealing with separate codes or simply stylistic variants, and what criteria one can use to characterize one variety as distinct from another. As we have seen, Gumperz makes the point that a particular social meaning can attach to a switch of “distinct codes” in one community and the use of a “stylistic alternate” in another. They are therefore functionally equivalent, but how can they be formally distinguished? When does one have a “style” as opposed to a “code”? This is the kind of question that Labov poses in his consideration of Negro speech in New York. He quotes the following extract of field recordings:

An' den like IF YOU MISS ONESIES? de OTHuh person to shoot to skelly; ef he miss, den you go again. An' IF YOU GET IN, YOU SHOOT TO TWOSIES. An' IF YOU GET IN TWOSIES, YOU GO TO threesies. An' IF YOU MISS threesies, THEN THE PERSON THa' miss skelly shoot THE SKELLIES an' shoot in THE ONESIES: an' IF HE MISS, YOU GO fom tthreesies to foursies.

As Labov points out, the problem here is to know whether this is an instance of code-switching or not. He comments:

In this extract, a 12-year-old Negro boy is explaining the game of Skelly. We can treat his variations as examples of code-switching: each time he uses a different variant, he moves into the system containing that variant. Lower case would then indicate ‘Non-standard Negro English’ and upper case ‘Standard English’. But it is an unconvincing effort: there is no obvious motivation for him to switch eighteen times in the course of this short passage. But on the other hand, can we treat the difference between *de* and *THE* as ‘free variation’? Such a decision would make no sense to either the speaker or the analyst, who both know that *de* is a stigmatized form. Without any clear way of categorizing this behavior, we are forced to speak of ‘stylistic variants’, and we are left with no fixed relation at all to the notion of linguistic structure. What is style if not a separate code, and when do we have two of them?

(Labov 1970: 35)

3.3. Variation according to use: register analysis

Labov’s concern is with the description of variation associated with social dialect, with what Halliday, McIntosh and Stevens (1964) call variation which is “distin-

guished according to the user”, but the problem exists in the same way, and perhaps in greater measure, with the description of variation which is “distinguished according to use”, or “registers”. Since it is the description of this kind of variation which is relevant to the pedagogic purpose of this study, and since the approach outlined by Halliday, McIntosh and Stevens (1964) has been widely advocated as providing a basis for the preparation of materials for the teaching of the varieties of English discourse, it will be necessary to examine the notion of “register” and the techniques proposed for “register analysis” very closely. I have already suggested, in Chapter 1 of this study (1.1.), that an analysis of language variation in terms of registers does not provide a satisfactory characterization of different areas of discourse. What I want to do now is to give detailed support to this suggestion and to show how the shortcomings of this approach give an indication of what a satisfactory approach to discourse description must involve.

The first thing we might notice is that the problem that Labov raises above is given no recognition in Halliday, McIntosh and Stevens (1964). On the contrary, the assumption is that variation takes the form of an alternation between formally distinct codes. The argument appears to be that since language varies there must logically be different varieties of language which can be formally differentiable. But all that follows logically from the fact that language varies is that there is *variation* in language: it does not follow that this must take the form of discrete *varieties*. Remarks like the following, however, suggest that Halliday *et al.* believe that it does follow:

Language varies as its function varies; it differs in different situations. The name given to a variety of a language distinguished according to use is ‘register’.
(Halliday *et al.* 1964: 87)

Elsewhere, registers are referred to as “types of language”, which strongly suggests that they are conceived of as formally distinct systems of one kind or another. This is brought out again in the following quotation:

There is no need to labour the point that a sports commentary, a church service and a school lesson are *linguistically quite distinct*. One sentence from any of these and many more situation types would enable us to identify it correctly.
(Halliday *et al.* 1964: 87)

It is easy to demonstrate that it is in fact impossible to assign a single sentence to a “situation type”. To take a very simple instance a sentence like “The persecution of the Christians continued unabated” could easily occur in a sermon or in a history lesson or in many other situations, so that its value as an indexical feature for any particular “register” is nil. It is in fact difficult to think of any sentence which would be uniquely associated with a situation type outside a limited number of stereotyped expressions to be found in legal documents and church liturgy. The difficulty is illustrated by one of the examples which Halliday *et al.* provide: “An early announcement is expected”. As they point out, and as Labov would no doubt agree, one cannot treat this as a free variant of “We ought to hear soon”, but nor can we unequivocally assign it to any particular register. It could easily occur in any of the three situation types that have been mentioned – a

sports commentary, a church service, or a school lesson – and innumerable others.

In fact, Halliday *et al.* acknowledge a little later in the chapter from which the above quotations have been drawn that sentences cannot be assigned to situation types in the way they suggest:

No one suggests, of course, that the various registers characteristic of different types of situation have nothing in common. On the contrary, a great deal of grammatical and lexical material is common to many of the registers of a given language, and some perhaps to all. (Halliday *et al.* 1964: 89)

This in effect contradicts the previous contention that registers can be recognized by some representative sentence taken at random since the sentence could easily be one containing “grammatical and lexical material” which a number of registers, and perhaps all, have in common. But then, on the same page as the remarks just quoted, we have a statement which, in effect, cancels out this contradiction by a further contradiction which supports the original contention. Thus:

It is by their formal properties that registers are defined. If two samples of language activity from what, on non-linguistic grounds, could be considered different situation-types show no differences in grammar or lexis, they are assigned to one and the same register: for the purposes of the description of the language there is only one situation-type here, not two. (Halliday *et al.* 1964: 89)

It would seem to follow from this that if we take a sentence as a sample of language activity and if this sentence happens to contain “grammatical and lexical material” which is common to a range of different registers, then this range of registers reduces automatically to one. If, for example, our sample is the sentence cited above: “An early announcement is expected”, and if, as has been suggested, this can occur in, say, a church service, a sports commentary and a school lesson (to use the examples previously discussed), then on this evidence, it can no longer be the case that these registers, or situations, or instances of language use are “linguistically quite distinct”. Indeed by the purely formal definition of register given above, they must all be considered as belonging to the same register.

Of course it might be objected that it is unfair to take a sentence as a sample of language activity, and that what Halliday *et al.* have in mind are samples of larger stretches of discourse. But as we have seen, they themselves use the sentence as a sample for the purposes of identification of registers. Indeed, they also use smaller linguistic units like lexical items. And if a sentence does not represent an adequate sample, what does? Even if we take a stretch of discourse consisting of a series of sentences we run into the same difficulty. Consider, for example, the following passage:

The children of the women who were pregnant and exposed to irradiation at Nagasaki and Hiroshima are, on average, shorter and lighter and have smaller heads, indicating an under-developed brain. Some show severe mental deficiencies, while others are unable to speak normally at five years old.

This passage could occur in a sermon, a political pamphlet, an article in an ecological review, a technical paper on the biological effects of radio-activity, and so on. On the evidence of this sample, all of these uses of language must be regarded as being the same register.

But now let us increase the size of the sample even further. The passage cited above is in fact taken from a “popular” exposition of the biological effects of atomic radiation.* The passage immediately following the one quoted runs as follows:

The detailed picture of the influence of radiation on pre-natal development has been obtained from studies with animals (Fig. 7.3). Unhappily, sufficient human cases are known to make it certain that the same pattern also occurs in man; and we can confidently superimpose a human time-scale on the mouse data shown in figure 7.3. Some of our information is derived from the survivors of the atom bombs in Japan. The children of the women who were pregnant ... etc.

Now we may say that the “grammatical and lexical material” here is not such as we would expect to find in, say, a sermon or a political pamphlet and to that extent might be said to indicate a different register. But by the same token, it represents a different register from that of the passage which immediately follows it. Since we are referring to linguistic evidence alone, we cannot assign the two passages to the same register and in the terms of Halliday *et al.* we have two situation-types occurring within the same paragraph. A corollary to the linguistic definition of register which they provide is, of course, that if two samples of language activity from what, on non-linguistic grounds, could be considered the *same* situation-type *do* show differences in grammar and lexis, they are assigned to *different* registers. What this means in effect is that whenever differences occur there is a switch of register. If, for example, a parson chooses to illustrate a theological point by reference to, let us say, biology or engineering or sociology, (as parsons are in fact quite prone to do) then this illustration constitutes a register shift, in so far as it involves a move into a different semantic field. The logical consequence of such an approach to the description of language variation is that one is ultimately left with a few obvious markers like expressions of the form “Dearly beloved Brethren” or “Let us pray” as the sole characterization of the register of the sermon. It all amounts to what Labov calls “an unconvincing effort”.

Furthermore, it is difficult to see how one can speak of the register of the church service at all, since its components clearly vary in linguistic character. Halliday *et al.* say that:

... there tends to be more difference between events in different registers than between different events in one register. (Halliday *et al.* 1964: 89)

If by “events” is meant “linguistic events” in the sense of formal linguistic elements (and it is difficult to see what else could be meant), then we have here another contradiction. We are told that differences correspond to different registers, so that any “difference between events” must represent a different register

* *Atomic radiation and life* by Peter Alexander, published by Penguin Books

and there can logically be no such thing as “different events in one register”. By definition according to formal properties, there can be no differences *within* a register. What one can presumably have are what might be called “register clusters” which would be sets of varieties with minimal formal differences, assuming that a measure of formal difference could be established. But then, of course, situations which one would normally wish to regard as in some sense distinct, like a church service, would cease to be so, since whatever measure of linguistic difference is used, a sermon would be grouped in the same cluster as a lecture, a political speech, and so on and not in the same cluster as a prayer or a psalm. From the point of view of its formal properties, a prayer would seem to have more in common with sets of instructions and cooking recipes than with sermons.

3.3.1. *The formal definition of register*

The essential difficulty with the notion of register, as it is defined in Halliday *et al.* (1964) has to do with the problem noted by Labov of distinguishing the use of different codes within a stretch of discourse that appears to have a certain unity as communication which an analysis in terms of different codes seems to belie. By defining registers in terms of their formal properties alone, thereby representing them as separate codes, Halliday *et al.* treat variation in discourse as arising from a constant and unmotivated shifting from one distinct “type of language” into another. Labov objects to this view of variation on the grounds that it is not convincing, but there is a more telling objection to it when it is adopted to account not for social dialect but for register. Dividing up discourse into different registers is not only unconvincing but it is in fact impossible.

Labov is able to indicate (by the use of lower case as opposed to upper case letters) when a system other than that of standard English is being used. The lower case elements in the discourse he quotes are recognizably stigmatized forms which can be assigned to the dialectal variety of ‘Non-standard Negro English’. Since we have two formally differentiable varieties here it is *possible* even though it may not be very enlightening to talk about code-switching. In fact, it is possible to recognize two codes but to account for their use in discourse by postulating a system which contains variable rules, so that one may acknowledge two codes at one level of analysis but account for them by one system at another. This in effect is what Labov does, and the same procedure is carried out in Blom and Gumperz (1972) where *Ranamål* and *Bokmål* are recognized as codes within the linguistic repertoire of a speech community in Norway but are accounted for in use by a single phonetic system. Codes can be distinguished by contrast: thus, as the name suggests, ‘Non-standard’ Negro speech is recognized in relation to standard English, and *Ranamål* contrasts formally with *Bokmål* in a similar way. But in what way does one recognize one register as opposed to another? The answer given by Halliday *et al.* is that one recognizes them by “differences in grammar or lexis”. What is meant by “differences” here, and what criteria can we use for deciding whether two stretches of language are different or the same?

At the phonetic level, of course, no two pieces of language are ever alike. But we can disregard this fact and think in terms of different types rather than differ-

ent tokens. In any piece of discourse we shall find that each sentence differs from the next syntactically and will contain different lexical items. Do these differences indicate a changing of register? Presumably not, and yet each sentence is grammatically and lexically distinct from the other, so that if registers are to be defined solely by reference to “differences in grammar or lexis” they should logically be assigned to different registers. In fact, if we take this definition seriously it will never be possible to assign two sentences to the *same* register. Obviously, Halliday *et al.* cannot be thinking of differences of this kind: they are presumably thinking of differences which are significant in some way. But if the notion of linguistically defined registers is to be taken seriously we need some explicit measure of significance and it is very difficult to imagine how such a measure could be established. It will not do, of course, to establish some norm of “ordinary” or “unmarked” usage against which other forms of use can be contrasted since registers are said to “cover the total range of our language activity” (Halliday *et al.* 1964: 89) so that there would be no way of setting up a register of “normal use” in the first place since there would be nothing to contrast it with. As we shall see, people who have attempted to put the proposals of Halliday *et al.* into practice have in fact made use of an intuitive sense of what is “normal” or “usual”, and this is quite justified as an operational procedure. But it can have no place in a theoretical definition.

Although there would seem to be no way of deciding whether two samples of language are different enough to be considered examples of different registers or not, the *kind* of difference seems to be conceived of as one which is basically stylistic rather than systemic. That is to say, the kind of difference that Halliday *et al.* have in mind does not seem to be the same as that between, for example, Bokmål and Ranamål as described in Blom and Gumperz (1972), or between the different High and Low varieties as described in Ferguson (1959). In Blom and Gumperz (1972), for example, we find a whole list of linguistic elements, including verb forms, relative pronouns, adverbs, conjunctions, and so on, which have alternative realizations in the two varieties. Blom and Gumperz comment:

These data constitute empirical evidence to support the view of the dialect (i.e. Ranamål) as a distinct linguistic entity.

(Blom and Gumperz 1972: 413)

Similarly, Ferguson finds clear linguistic distinctions between his two varieties, and comments:

One of the most striking differences between H and L (i.e. High and Low) in the defining languages is in the grammatical structure. H has grammatical categories not present in L and has an inflectional system for nouns and verbs which is much reduced or totally absent in L. (Ferguson 1959: 433)

Now these are not the kind of differences in grammar that Halliday *et al.* are talking about. There is no suggestion, as far as I can see, that each register has different grammatical categories, or that grammatical categories, like tense, aspect, and so on are given alternative realizations in different registers. In this respect even though they are defined in terms of their formal properties registers are not

represented as different systems. This seems to be the basic paradox underlying the notion of the formally defined register. One can only define a variety of language by its formal properties if it exemplifies co-occurrence rules which reveal it to conform to a separate system. Although there are certain varieties of English which might be said to be systemic in this sense, exemplifying fairly strict co-occurrence rules, as in the case of legal agreements, perhaps, and certain kinds of preaching, the vast proportion of English discourse does not vary in this systemic way. It varies stylistically, and stylistic variation, unlike systemic variation, cannot be accounted for simply in terms of formal linguistic properties.

By stylistic variation I mean the differential use of a single linguistic system or code, and by systemic variation I mean the differential use of more than one linguistic system or code. I have said that the former cannot be accounted for in terms of formal linguistic properties, and by this I mean that it cannot be accounted for *qualitatively* by representing it as a system of co-occurring types of linguistic unit. It is possible to account for it, however, in terms of formal linguistic properties in a quantitative sense by representing it as revealing different frequencies of linguistic tokens. In other words, register may be considered as belonging not to *langue* but to *parole*. But since the concept of “register” has to do with the patterns of variation within discourse, the notion of *parole* is extended to mean not the individual’s personal and idiosyncratic realization of the language system, which is the way de Saussure conceived of it (see Chapter 2.2.), but with the manner in which individual behaviour is constrained by social factors. We must consider *parole* not as “individual custom” (to use Hockett’s phrase) but as “social custom”. The quantitative approach to the analysis of discourse variation, then, involves correlating tokens of linguistic elements with features of situations of use. From this point of view, “register” is not defined as it were internally by reference to linguistic properties alone but externally with reference to some set of situational correlates.

3.3.2. *The situational definition of register*

In fact, Halliday *et al.* themselves suggest that in the absence of the kind of large scale analysis which would be required to define registers by internal criteria, it would be “useful” nevertheless to describe them with reference to external correlates:

While we still lack a detailed description of the registers of a language on the basis of their formal properties, it is nevertheless useful to refer to this type of language variety from the point of view of institutional linguistics. There is enough evidence for us to be able to recognize the major situation types to which formally distinct registers correspond; *others can be predicted and defined from outside language*. (Halliday *et al.* 1964: 90; my emphasis)

The suggestion seems to be that although the notion of register can only be given adequate definition in terms of its internal linguistic patterning, as a notion in “institutional linguistics” (as opposed, one supposes, to theoretical or descriptive linguistics) it might be operationally useful to think of register in relation to external situational features “from outside language”.

These features are distinguished along three “dimensions”: field of discourse, mode of discourse and style of discourse. Field of discourse is said to refer to “what is going on: to the area of operation of the language activity”. Where “language activity accounts for practically the whole of the relevant activity”, field may be equated with topic or subject-matter, and where the language activity is slight, it may correspond with the situational setting. An example of a register recognized by reference to field as subject-matter might be that of biology or mathematics, and an example of one recognized by reference to field as setting, it is suggested, is “a register of domestic chores” like Hoovering the carpets. Mode of discourse refers to the medium in which the language is manifested, the kind of channel used. Written and spoken language are said to be “primary modes” and within them sub-divisions can be made. Thus, it is suggested, there is a register of journalism which can be recognized by reference to mode, presumably as a sub-division of “written mode”, and within journalism, at a more refined level of “delicacy”, there are further sub-classifications into “reportage, editorial comment, feature writing and so on”. (Halliday *et al.* 1964: 92) The implication is that all of these registers can be distinguished by reference to different modes of discourse. Although it is difficult to get a conceptual grasp of what exactly “mode” can mean here, it is obvious that it must include the form the message takes as well as the channel through which it is transmitted.

The third dimension is “style of discourse”, and this has to do with “the relations among the participants”. These relations control the degree of formality of the language used, which may be described as “formal”, “informal”, “polite”, and so on (see Joos 1962). Halliday *et al.* suggests sub-divisions here too, however, such that a “polite” style may, at a more delicate level, be further distinguished as “teacher to student” style. This pre-supposes that there is a fixed degree of formality associated with certain role relationships and that formality is a function of these relationships alone. That is to say, the implication is that the confrontation of teacher and student, for example, will always yield a certain style, no matter where or under what circumstances the encounter takes place. It seems obvious that this is, in fact, not the case. The style that a teacher uses when lecturing, for example, is likely to be more formal than the style he uses when talking to students in the common room. Formal occasions call for a formal style and informal occasions call for an informal one. Style, therefore, would appear to relate not only to the addresser and the addressee but also to the setting in which the interaction takes place. This being so, the dimension of style of discourse would seem to overlap with that of field. Both may include the situational setting. Furthermore, it is difficult to see how style is to be distinguished from mode. The kind of formality one associates with, say, a lecture, and the kind of informality one associates with a conversation over coffee is attributed by Halliday *et al.* not to the dimension of style but to that of mode. Thus they speak of a “lecturing mode” and more “delicately” of an “academic lecturing mode”, and they make a distinction between “conversational mode” and “colloquial style”. It is extremely difficult to imagine how one might draw this distinction in practice. In general, it is difficult to see how one might associate the occurrence of certain linguistic ele-

ments with one dimension rather than with another. Halliday *et al.* acknowledge that there will be a degree of overlap:

It is as the product of these three dimensions of classification that we can best define and identify register. The criteria are not absolute or independent; they are all variable in delicacy, and the more delicate the classification the more the three overlap. The formal properties of any given language event will be those associated with the intersection of the appropriate field, mode and style.
(Halliday *et al.* 1964: 93)

It is difficult to see how register can be defined by reference to dimensions of classification which are not themselves clearly defined. The reason they overlap, and not only at more “delicate” levels of analysis, is because they are not based on a recognition of the different situational factors involved, like addresser, addressee, setting, topic and so on; as elements in terms of which each dimension must be defined. In other words, what one needs is a definition of “mode”, for example, which will distinguish it from “style” and “field” by reference to which factors it relates to.

What I am suggesting is that the dimensions of classification which Halliday *et al.* propose are vague and impressionistic notions which need to be made more precise by reference to the kind of framework of factors as suggested in Jakobson (1960) and Hymes (1962). The fact is that although we are told that “It is as the product of these three dimensions of classification that we can best define and identify register”, what is of interest to Halliday *et al.* is the formal linguistic differences between kinds of language use. The dimensions they propose are essentially devices for *identifying* and not for *defining* registers. If this were not so, then there would obviously be a contradiction between the statement quoted above and that quoted previously to the effect that “It is by their formal properties that registers are defined”. The focus of Halliday *et al.* is on that factor in the speech event which Jakobson and Hymes refer to as “code” and the other factors are only adduced to the extent that they are needed to identify it.

The imprecision of these three dimensions is to some extent reflected in the confusion of terminology which different writers have used to refer to them. Thus, as is noted in Spencer and Gregory (1964) what is referred to in Halliday *et al.* 1964 as “field” is referred to in Catford (1965) as “register”, and in Strang (1962) we have the term “medium” replacing “mode” and the terms “register” and “style” signifying notions which are different from what these terms appear to signify in either Halliday *et al.* (1964) and Catford (1965). Spencer and Gregory themselves replace “style” with “tenor” and in Gregory (1967) we have the additional “contextual categories” of “personal tenor” and “functional tenor” as well as a whole range of what he calls “situational categories”. As Spencer and Gregory point out:

Terminology and definition in this area of language study are both clearly in a developing stage ...

And for good measure they add a further dimension:

... and the part played by *genre* and a consciousness of *genre* in language choices has still to be stated and reconciled with these other dimensions of language variation. (Spencer and Gregory 1964: 87)

3.3.3. General stylistic analysis

This profusion and confusion of terms is also pointed out in Crystal and Davy (1969), to whose “general stylistic” analysis of language variation we now turn. They note:

... the categories which have been set up to account for the features, or sets of features, in the language data are frequently inconsistently used, are incomplete, and usually have no adequate formal basis.

(Crystal and Davy 1969: 61)

As an instance of inconsistency they point to the fact that the term “register” has been applied to a whole range of uses of language irregardless of the fact that there is considerable variation in the manner in which such uses can be distinguished. It is the use of this term in Halliday *et al.* (1964) that they are objecting to here. They point out:

... there are very great differences in the nature of the situational variables involved in these uses of English, and ... it is inconsistent, unrealistic, and confusing to obscure these differences by grouping everything under the same heading, as well as an unnecessary trivialization of what is a potentially useful concept.

(Crystal and Davy 1969: 61)

This would seem to be rather an unfair criticism, since Halliday *et al.* do in fact recognize differences in the nature of the situational variables concerned and for this reason postulate their three dimensions of classification. Where they can be criticized, and where they have been criticized above, is at the level of these dimensions, where, as we have seen, confusions between what is “mode” as opposed to “style” arise because different factors like channel, setting and topic are not distinguished when establishing these “situational variables”. But Crystal and Davy object to these dimensions of Halliday *et al.* not on the grounds of their inconsistency, but on the grounds of incompleteness. They say, for example, that “one central theoretical variable” has been ignored, namely what they call “modality”, by which term, judging from the following quotation, they mean essentially message form:

... there would be linguistic differences of modality if, within the province of conversation, in its written form (what might be called ‘correspondence’, for the sake of convenience), one chose to communicate a message in the shape of a letter, a postcard, a note, a telegram, or a memo; or, within the province of scientific English, if one chose to write up a topic in the form of a lecture, report, essay, monograph, or textbook. (Crystal and Davy 1969: 74-5)

In fact, as we have already seen, modality in this sense is not ignored by Halliday *et al.* but simply subsumed under what they call “mode”.

Crystal and Davy provide their own “dimensions of situational constraint” and there is a suggestion that these are in some way different in kind from those

of Halliday *et al.*, Catford, Strang and the others previously mentioned. They say that:

... there are many aspects of the way in which English is used which no one has tried to account for, and which cannot be handled adequately by such categories as *register*, *tenor*, *field*, *mode*, and so on in any of their current senses.
(Crystal and Davy 1969: 61)

One assumes that it is the purpose of their own categories to capture some of these aspects. On examination, however, it becomes clear that the “dimensions of situational constraint” that are being proposed are simply a refinement of the categories previously used, and, in fact, the refinement applies only to the one category of mode. We have already noted that “modality” is an extraction from this dimension: so also are the two distinctions under the general heading of “discourse”: “medium” and “participation”. Thus what for Halliday *et al.* would be simply “lecturing mode” would presumably be distinguished by Crystal and Davy as being a lecture under the heading of “modality”, “speech” as opposed to “writing” under the heading of “medium” and “monologue” as opposed to “dialogue” under the heading of “participation”. Hence it is not true that no one has tried to account for these aspects of use. The point is that they have not been accounted for in a sufficiently explicit fashion. The other dimensions which are offered by Crystal and Davy provide no refinement at all but only different terms. Thus what they call “province” is what Halliday *et al.* call “field” and what they call “status” is what Halliday *et al.* call “style”. The only dimension which represents “aspects of the way in which English is used” which is not covered (no matter how inexplicitly) by such terms as “mode”, “field”, “tenor” is in fact that which Crystal and Davy call “singularity”. But since this refers to features of use “which cannot be related to anything systematic amongst the community as a whole, or some group of it, but only to preferences of the individual user” (Crystal and Davy 1969: 76), it is irrelevant to the study of language varieties anyway. Singularity is a feature of *parole* in the de Saussure sense, or of what Halliday *et al.* call idiolect, and it seems doubtful if one can consider it as in any sense a “dimension of situational constraint”, since its defining feature is precisely that it is not constrained by external factors.

3.4. Variation in relation to code

It would appear then that the situational variables proposed by Crystal and Davy are not different in kind from those proposed by other writers who have been concerned with varieties of English. Furthermore, the use which is made of these dimensions is the same. Their purpose is to provide an identifying tag for pieces of discourse which differ in respect of formal linguistic properties. The focus is again on the code factor and other factors are adduced to the extent that it is necessary to do so in order to provide a label. Thus in a discussion as to whether a face-to-face conversation and a telephone conversation should be considered as examples of the same province or as examples of different provinces, it is the degree of linguistic similarity which is decisive:

... it is difficult to suggest any linguistic features which could not equally well have turned up in the earlier passages of conversation. There is the same listing of dominant features at sentence, clause, and group levels, for example; the same descriptive problems emerge ... in vocabulary there is the same use of colloquialism, idiom, and vocalization, apart from the minor differences noted above. In other words, it can be argued that while the *range* of variety markers is considerably diminished in telephone conversation ... the *kind* of marker which occurs (with the one exception of the distinctive pausal system) is essentially the same. The conclusion which suggests itself, therefore, is that telephone conversation and other conversation are different only in degree, and that the former can most realistically be seen as a sub-province of the more general notion. (Crystal and Davy 1969: 121)

There are all kinds of reasons why one might wish to regard a telephone conversation as a different kind of event from a face-to-face conversation. For one thing since the actual channel plays a more prominent role in the former in the sense that one has to continually ensure that it is clear, one might suppose that it should be regarded as a different mode (in the sense of Halliday *et al.*) or in the terms of Crystal and Davy a different kind of discourse. Again, in so far as the absence of an immediate physical setting which is shared leads to a greater dependence on verbal means for communicating meanings, one might suppose that the two events might be said to differ in modality. Indeed, Crystal and Davy do point to a number of features of telephone conversation which distinguish it from a face-to-face interaction. Among those mentioned is the higher frequency of questions and responses, and the likelihood of a different “semantic structure” in that the structure of a telephone conversation is in some degree determined by the purpose for which the call is made. Both of these features might be associated with modality. Another aspect of telephone calls which distinguishes them from ordinary conversation is the kind of formulae which are used to initiate and terminate the exchange. This aspect would presumably relate to that sub-division of the discourse variable that Crystal and Davy call “participation”. But these differences, though acknowledged, are downgraded to a less significant status because the linguistic differences which can be attributed to province are more obvious. It is clear from this that, as with Halliday *et al.*, what is seen as defining a variety of use is the manner in which the code is exemplified. Even the “dimensions of situational constraint” are distinguished in terms of linguistic properties. A telephone conversation and a face-to-face interaction both fall within the same province *because* they have a wide range of linguistic properties in common. They are said to be “different only in degree” and this degree is measured entirely in relation to shared linguistic features.

It was pointed out above that there are a number of linguistic features of telephone conversation, which Crystal and Davy themselves point out, that it seems reasonable to relate with situational variables other than province. They are not so related in the analysis but are passed over in favour of a concentration on this one variable, and there is an implication that these features are in fact to be related to province. This brings up the question as to how, having established these dimensions, Crystal and Davy actually make use of them in their analysis.

We are told that the procedure they followed in their analysis was to take two sheets of paper and to write down linguistic features which appeared to be significant in some way on one piece and on the other the dimension of situational constraint with which it would seem intuitively to be associated. But in fact there is little evidence of this detailed correlation in the analyses which they provide. One might have expected some demonstration of the techniques they suggest in the form of tabulated arrays of linguistic features and the different dimensions of situational constraint with which they are correlated. There would then be some way of checking the rather general and impressionistic comments that are made against a more detailed analysis, and there would be some basis for understanding why, in the case considered above, certain features of language use are associated with province as opposed to discourse participation, modality or any other dimension. The precision of the analytical technique which is proposed is not, then, matched by a precision in the analysis itself. This is not to say that the analyses are not often perceptive and enlightening but only that they do not appear to derive directly from the proposed correlating procedure. To take another example, Crystal and Davy have a number of interesting observations to make about the way English is commonly used in legal documents, but these take the form of remarks like the following:

Legal English contains only complete major sentences. (p. 203)

One of the most striking characteristics of written legal English is that it is so highly nominal. (p. 205)

The range of vocabulary that may be met in legal language is extremely wide ... (p. 207)

One is prompted to ask whether the terms “legal English”, “written legal English” and “legal language” are intended as free variants here (the title of this chapter of the book is “The *language* of legal documents”). This is not a quibble. If legal English, whether spoken or written, contains only complete major sentences, then this linguistic feature cannot be associated with the dimension of “discourse medium”, but if this is only a feature of *written* legal English it might be. Similarly, the fact that *written* legal English is highly nominal might represent a way of distinguishing it from *spoken* legal English, or from written English of another kind: that is to say the linguistic features of nominalization may be correlated with either discourse medium or with province. But these features might equally well be associated with other dimensions of situational constraint: with modality, for example, or status. A discussion of the linguistic features of what is vaguely and variously referred to as “legal English”, “legal written English” and “legal language” in effect conflates the very distinctions which it is the purpose of the proposed analytic techniques to establish.

Crystal and Davy, as we have seen, point to the considerable confusion in the theoretical statements that have been made about “registers”, and they offer their work as an attempt to come to grips with the practicalities of actual analysis:

... stylistic theory, at the time of writing, has reached a stage where it would do well to wait for practical analysis to catch up, so that the theoretical categories may be tested against a wide range of data, and more detailed analyses

of texts carried out. Consequently, further theorizing in this book is kept to a minimum: we are mainly concerned to establish certain central notions that do not seem to have been sufficiently rigorously defined and verified hitherto. (Crystal and Davy 1969: 62)

One of course sympathizes with the desire to be practical, and the kind of orientation to the study of discourse that these comments imply is particularly appropriate to the aims of this present study, but it is difficult to accept that the theoretical categories *have* been tested in the analyses offered by Crystal and Davy. These analyses, as has already been noted, do not in fact show how such categories of situational constraint correlate in detail with linguistic features, and it is hard to see which “central notions” have been “established” or how the analysis offered “defines” and “verifies” them.

It is difficult to avoid the conclusion that, for all claims that are made, the stylistic analysis of Crystal and Davy represents no real advance on the proposals of Halliday *et al.* In both cases it would appear that different “varieties” of English are first intuitively recognized and then characterized in terms of their linguistic properties. The situational variables or dimensions appear to be arrived at in a *post hoc* manner, and play no part in either the identification or the definition of the varieties in question. The focus is on the code factor and all other factors which bear upon the variation of language in use are defined by reference to it. In consequence, what the analysis yields is not a characterization of a stretch of discourse as a type of communication but as an exemplification of the code.

The basic assumption underlying the work on language varieties that have been reviewed above is that the different uses of language can be satisfactorily described in terms of the formal linguistic elements which they exemplify. To use the terminology introduced in the previous chapter (2.3), language varieties are seen as instances of usage rather than as instances of use. This orientation to the description of discourse has exercised considerable influence on English language teaching, and courses have been designed based on frequency counts of linguistic units in particular “registers” (see in particular Ewer and Latorre 1967-1969). Since this view of variety has been so influential, it is clearly of importance to recognize its possible limitations, and it is for this reason that so much space has been devoted to a consideration of the work of Halliday *et al.* and Crystal and Davy.

3.5. Other work in stylistic analysis

It should be noted, however, that the assumption that language use can be accounted for by reference to code elements underlies a far wider range of work within the general area of “style study” or “stylistic analysis”, and a brief consideration of some of this work will be useful in assessing the extent to which the assumption is valid. We may begin by noting that the approach to the study of style which goes under the title of “new rhetoric” derives from essentially the same orientation as that of Halliday *et al.* and Crystal and Davy, at least as it is presented in Winterowd (1968). Winterowd’s allegiance is to transformational-

generative grammar and he sees it as providing the rhetorician with the means of making systematic statements about style:

To an amazing degree, transformational grammarians have begun to set forth the system of rules that describes the limitation of choices. The rhetorician of the new rhetoric will undoubtedly use the tools provided by linguists and *thereby* annex for himself a systematic description of style that will really define the periodic or the coupé the exalted or the sublime ... *the linguist, then, will provide the rhetorician with a system of analysis and a viable taxonomy.* (Winterowd 1968: 82; my emphasis)

The rhetorician can of course with profit make use of linguistic analysis and thereby make his description of linguistic structure more precise, but it does not follow that his description of *style* will be more systematic, if by style is meant the manner in which linguistic forms are used to bring about a certain communicative effect. To put the matter simply, the linguist's "system of analysis" operates on the code, whereas the rhetorician's must operate on messages. Winterowd provides a list of traditional rhetorical terms which he believes can be given a more precise definition within linguistics. They include: *sublime, perspicuous, ornate, clear, intricate, simple, complex, fluid, cursive, crabbed, eccentric, bombastic, humble, free-flowing, open, abrupt, languid*. Now where these terms refer to linguistic structure, as in the case of *simple* and *complex*, it is reasonable to suppose that the linguist would be able to provide a more exact description. But where they refer to the communicative effect of linguistic structures, as in the case of terms like *sublime* and *bombastic*, a linguist's description will not provide a definition. One cannot say that a certain stretch of discourse has certain linguistic properties and is therefore sublime in the same way as one can say that it has certain linguistic properties and is therefore complex. What one can do of course is to take a number of passages which one intuitively feels are sublime and then try to discover whether they have any linguistic properties in common. If they have, then those common properties might be said to be features of a *sublime* use of language, or, to put it another way, that these properties are required for the effective communication of a *sublime* message. But they do not of themselves constitute sublimity.

The point then is that a description of the linguistic forms of a piece of discourse cannot serve to define how they function to achieve a particular communicative effect. Having analysed a given text in terms of its linguistic properties, one has still to explain how they contribute to the communication of the particular kind of message that the text conveys. Why should the occurrence of certain linguistic elements be associated with kinds of language use, whether these be sublime or bombastic or legal or journalistic or scientific or whatever? What is it in these uses that requires certain forms and not others? It is questions like these that we have to answer if we are to provide a link between the linguistic analysis of a text and how we perceive it as a piece of communication.

3.5.1. *The analysis of literary texts*

It is the neglect of questions of this kind that has made the application of linguistic analysis to literary texts so controversial an issue (see, for example, Fowler 1971). Literary scholars have frequently pointed out that such an analysis often misses the essential significance of literary expression, and that the breakdown of a text into its linguistic components very often leads to no conclusion about the nature of the text as a literary message. Thus Riffaterre objects to the analysis of Baudelaire's *Les Chats* in Jakobson and Levi-Strauss (1962) on the grounds that it yields no real insight into the poem's underlying theme. His point is that a formal analysis cannot differentiate between those structures which have a literary function within the poem and those which are "unmarked". His belief is

that the poem may contain certain structures that play no part in its function and effect as a literary work of art, and that there may be no way for structural linguistics to distinguish between these unmarked structures and those that are literarily active. Conversely, there may well be strictly poetic structures that cannot be recognized as such by an analysis not geared to the specificity of poetic language. (Riffaterre 1966: 202)

What Riffaterre is pointing to here is the absence of a link between a linguistic analysis of a poem and its particular communicative effect. Much the same observation is made by Hough: without specifying particular practitioners he refers to work on individual style which produces inventories of linguistic features and comments:

In much early work of this kind no literary conclusions are drawn. What we have is virtually an accumulation of evidence on which such conclusions might be based, but no more. A further effect of this procedure is that in a complete inventory much of what is recorded may virtually be waste matter. Many of the qualities described have nothing particularly characteristic about them and lead to no increase in literary understanding. Much of what is presented is not the fruit of authentic observation but results rather from the mechanical application of a set scheme. It is the prevalence of such studies in which the aesthetic dimension has either been renounced or has never been arrived at that has given rise to a suspicion of stylistic work among many literary students. (Hough 1969: 40-1)

What Hough refers to as "the aesthetic dimension" and Riffaterre as the "function and effect as a literary work of art" is presumably that communicative quality of a literary text that characterizes it as a particular kind of message. As we have noted in our consideration of the work of Crystal and Davy, this type of characterization is beyond the scope of an analysis which describes a text simply in terms of its linguistic properties.

In fact, although one can point to instances of stylistic analysis where the linguist deliberately holds back from any "literary conclusion" as to the aesthetic significance of his findings (as for example in Halliday 1966; Levin 1964), it is common to find that linguists depart from their linguistic brief to comment on the communicative function of the linguistic features they describe. Usually such comments are of a tentative and impressionistic nature and contrast with the pre-

cision of the linguistic analysis to which they are linked. Very often, in fact, they involve the use of notions reminiscent of literary criticism, notions which the linguist might elsewhere claim can be given a more precise definition in linguistic terms. In other words, when it comes to a consideration of the kind of question posed earlier regarding the manner in which a text functions as communication, the linguist's remarks seem not to be very much different from those of the literary scholar.

The work of Thorne might serve as an example of the discrepancy of precision between statements about form and statements about function, or in the terms of Leech (1965), between "linguistic exegesis" and "critical exegesis". Like Winterowd, Thorne believes that traditional terms in rhetorical or stylistic descriptions can be given a precise definition by reference to linguistics:

if terms like 'loose', or 'terse', or 'emphatic' (to take other examples from the traditional vocabulary of stylistics) have any significance as descriptions of style – and surely they do – it must be because, like the description 'complex', they relate to certain identifiable structural properties.

(Thorne 1970: 188)

As has already been noted in the discussion of Winterowd's remarks, it seems unreasonable to suppose that linguistics can provide a structural definition of rhetorical terms which refer to features of language use other than those which have to do with linguistic structure. Of the terms which Thorne cites, *loose* and perhaps *terse* might be said to be impressionistic terms for certain structural properties of a text, but *emphatic*, like *sublime* refers to the *effect* of certain structures used in a particular context to fulfil a particular function. One might put the matter differently by saying that one can meaningfully refer to a complex sentence, or even a loose sentence or a terse sentence, but hardly to an emphatic sentence or a sublime sentence. Expressions like *emphatic* and *sublime* refer to statements, and represent some sort of judgement as to what communicative force the use of particular sentences might have in particular contexts. Even with an expression like *terse* one can imagine a number of ways in which the communicative quality it would refer to can be given formal realization. Later in his paper, Thorne makes the comment:

What the impressionistic terms of stylistics are impressions of are types of grammatical structures.

(Thorne 1970: 188)

In fact, many of the terms in traditional stylistic descriptions are impressions of types of "illocutionary force" (Austin 1962; Boyd and Thorne 1969). They relate not to structural properties as such but to the kind of message which such properties convey.

It is for this reason that when a formal analysis has been conducted, one is still left with the task of relating it to the way one understands the piece of discourse that has been analysed. In establishing this relationship, the impressionistic terms necessarily return. Thus in his brief analysis of the style of a passage from Raymond Chandler, Thorne provides a description of linguistic structure which in effect defines the stylistic term *repetitive* but having done so, and having thereby

performed his “linguistic exegesis”, he draws literary conclusions by using impressionistic terms:

This highly repetitive style plays a major part in creating the mood of aimless, nervous agitation the passage conveys. (Thorne 1970: 191)

It is in fact to the “part” that linguistic structures “play” that most stylistic terms of a traditional kind refer. The terms *aimless* and *nervous* and *agitated* are the kind of impressionistic terms which literary critics use, and which, as Thorne’s own use of such expressions makes clear, do not refer to types of grammatical structure. The real objection to such terms is that they are used in the same way as terms which *do* relate to grammatical structures like *complex* and *repetitive*, so that there is a failure to recognize that when referring to a piece of writing as *complex*, for example, one is making a comment on its linguistic features, and when referring to it as *nervous* or *sublime* or *emphatic* one is making a comment on the effect of such features. But, as we have seen, the linguist who analyses style appears not to keep these two kinds of assessment distinct either. The difference is that whereas the literary critic focuses on literary function and tends to use terms as if they all referred to communicative effect, the linguist focuses on linguistic form and tends to define all terms by reference to linguistic features. The fact is, as I have argued elsewhere (Widdowson 1972, 1973), the linguist and the literary scholar see literary texts as different kinds of phenomena.

I do not of course wish to question the value of the kind of analysis which Thorne undertakes but only to establish where this value lies. Linguistic analysis can provide substantiating evidence for critical judgements and can reveal features of a literary text which might otherwise be missed and to serve as a means of achieving a fuller “response”. But it is important to recognize, I think, that it *is* a means and not an end in itself. Thorne himself acknowledges this when he draws conclusions as to the literary effect of the linguistic structures he describes. He seems to be aware that ultimately the significance or the total effect of a literary text cannot be captured by a formal linguistic statement. In his analysis of Cummings’ poem *anyone lived in pretty how town*, for example, he points out that the precision of his grammatical account is ultimately based on impressions of the poem’s meaning which can only be described by making vague remarks. In other words, he can be precise about the structural properties of the text, but not about the part they play in conveying the particular kind of message the poem represents. He says:

although it is exceedingly difficult to analyse the nature of the relationship it seems that there is a relationship between the structure of the grammar which I propose for the poem and my understanding of it.

(Thorne 1965: 56)

What Thorne is referring to here is the relationship between linguistic form and communicative function. The point that I would wish to make is that it is precisely this relationship that we need to investigate if we are to give a satisfactory characterization of style.

The work that has been reviewed, both in the area of literary stylistics and general stylistics, reveals the limitations of an approach to analysis which describes language use simply in terms of code elements. In effect, such an approach treats different kinds of discourse as different exemplifications of the language system and thereby effaces the distinction made in the previous chapter between usage and use (2.3). What an analysis based on this approach yields is information about the incidence of different linguistic units: what it does not yield is information about how these units function in combination with each other to represent different communicative acts. Since the focus is on form rather than function, different communicative acts which share certain formal characteristics are not distinguished, and instead distinctions are made between what are different formal realizations of the same act. An example will make this point clear.

3.5.2. *The analysis of scientific English as usage*

In Huddleston, Hudson, Winter and Henrici (1968) we have a report of a large scale analysis of written scientific English using the formal approach we have been discussing. In his discussion of what he calls “sentence-adjuncts”, Winter points out that there are syntactic differences between adverbial expressions like *however*, *therefore* and *furthermore* and adverbial expressions like *for this reason*, *despite this*, and *then*. This being so, he is obliged to distinguish them, and to group the first kind into one class and the second into another. As he puts it:

If an adverb cannot be the focus of a theme-predication construction, there is a good chance that it will be an item we would treat as a sentence-adjunct; and conversely, if it can be treated as focus in such a construction, it cannot be a sentence-adjunct. Thus it is not possible to treat *however*, *therefore* and *furthermore* in this way (It is however that ...), which is consistent with treating them as sentence-adjuncts, whereas it is possible with *for this reason*, *despite this* and *then* (meaning ‘at that time’), which means that they are not sentence-adjuncts in spite of their apparent semantic similarity to other items which are sentence-adjuncts. (Huddleston *et al.* 1968: 561)

Having distinguished a class of linguistic items by formal criteria, Winter then makes sub-divisions by reference to their communicative function. *Therefore*, for instance, is grouped with terms like *thus* and *hence* and labelled “logical sequence sentence-adjuncts”, and *however* is grouped with terms like *in fact* and *nevertheless* and labelled “contrast sentence-adjuncts”. But of course if functional criteria are to be used, then expressions like *for this reason* must also be grouped with *therefore* since the sentence in which it would occur would function in the same way as a statement of “logical sequence” or a deductive statement; and by the same token expressions like *despite this* should be included with *however* since both of them function as markers of “contrast” statements, or qualifications. In other words, there is a conflict of criteria here, and elements which have similar formal properties are found to require sub-classification in terms of the very functional criteria which are rejected as a basis of classification in the first place. If one is looking at functions, then *therefore* and *for this reason* should be considered together, and if one is looking at formal properties, then *therefore* and *however* should be considered together, but one cannot have it both ways.

But if one is to consider the communicative functions of linguistic elements, one has to accept that they may cut across formal categories in much more drastic ways. Thus one has to recognize not only that, let us say, a deductive statement may be made by the use of both a sentence-adjunct (*therefore*) and a non sentence-adjunct (*for this reason*) but also by the use of linguistic elements which are not adjuncts at all, like *This shows that ... It follows from this that ...* and so on. In a formal analysis of the kind exemplified by Huddleston *et al.*, expressions like this would of course be treated under a quite different heading in the description and there would be no way of recording their functional similarity to elements of a different form. In other words, there would be no means whereby the kind of relationship that Thorne refers to between linguistic form and communicative effect can be established.

A corollary to this is that it is not possible to draw reliable conclusions as to what kind of communication the analysed texts represent on the basis of formal evidence. In fact, Winter does draw certain conclusions. Having given the different frequencies of the “logical sequence sentence-adjuncts” in the corpus, he adds:

There are some interesting differences between the three strata into which we divided our corpus, according to the overall distribution of these sentence-adjuncts. Of the 382, there were 114 in the High stratum, 190 in the Middle stratum, and only 78 in the Low stratum – i.e. they were more common in the Middle stratum texts, which were taken from university textbooks, than in the High stratum text (technical periodicals), and much more common in the former than in the Low stratum (‘popular’ scientific journals). In fact, they were 2 ½ times as common in the Middle as in the Low stratum texts, and 1 ½ times as common in the High stratum texts. The reasons for these differences may be as follows: All texts rely on the assumption of specialized knowledge, but the Middle stratum texts rely least on these assumptions for logical connection, since the business of teaching (the use of text-books) would appear to be to make the logical connections as explicit as possible. The difference between the High stratum and the Low stratum texts may be due to the more intensive presentation of information in the High stratum, the Low stratum being necessarily the most generalized of the strata. (Huddleston *et al.* 1968: 577-8)

It is appropriate that Winter should couch his conclusions in these tentative terms since it is not possible to say that the logical connections in Middle stratum texts are more explicit *because* there is a higher incidence of these sentence-adjuncts. As we have seen, there are other ways of making logical connection explicit without recourse to such forms by the use of adverbs which are not sentence-adjuncts like *for this reason*, or by the use of such expressions as *It follows that ...* and so on, which are equally explicit markers of deductive statements. What it would be of interest to know is the proportion of deductive statements in each of the three strata which make use of sentence-adjuncts as opposed to other formal devices. One would imagine, for example, that the Low stratum texts would contain a high number of devices to make communicative purpose explicit, and that they would be distinguishable from the other strata not because the logi-

cal connections were less explicit but because the explicitness took a different form. Winter's remarks here represent tentative suggestions as to the relationship between linguistic forms and their communicative effect, but in fact there just is not the evidence available from his analysis to make such suggestions, at least with any degree of confidence.

To draw conclusions as to the communicative nature of a text on the basis of the occurrence of certain linguistic forms is to make the assumption that there is a one-to-one correspondence between forms and functions such that a certain function will always be fulfilled by the form which corresponds to that function within the code of the language. That is to say, as Halliday has pointed out, one can say that the existence of, for example, the imperative form in the language is a "reflection" of the fact that one of the principal functions which a language is required to serve is the directing of other people's activities by means of orders, instructions and so on, but this does not mean that the function of ordering, instructing and so on requires the use of the imperative form. We need to make a careful distinction between those features of the language system which *reflect* communicative functions and those features of language use which *realize* communicative functions. This distinction will be taken up and discussed in greater detail in the following chapter. For the moment it is important to recognize that an analysis of discourse in terms of formal properties, such as is exemplified in Huddleston *et al.* (1968), can only yield information about functions as features of the language system.

In fact it is hard not to avoid the conclusion that the principal interest of Huddleston and his associates lies in the establishing of grammatical categories and that it is only of incidental concern that these categories are exemplified in scientific texts. The focus is squarely on usage rather than use. This is clear from the first paragraph of the introduction to their work:

The present report aims to give an account of selected areas of the grammar of written scientific English, based on the analysis of a corpus of some 135,000 words. Obviously no corpus can be analysed in isolation – the description will be of interest only if the grammatical categories established have validity beyond the corpus. A considerable part of our research was thus necessarily devoted to work on "common core" English in order to arrive at a description that could be supplied in the textual analysis. Our concern with written scientific English has meant that we could afford to neglect those aspects of English that are not represented in this register, but the areas that have been examined in most detail are certainly not exclusive to the language of science. We would hope, therefore, that the work will make some contribution to the study of English as a whole, as well as to our knowledge of one particular variety of English. (Huddleston *et al.* 1968: 1)

There is no claim here that the "register" of scientific written English is to be "discovered" by formal analysis: on the contrary, the implication is that the register is given in advance. What is more, the formal properties that have been given most attention are precisely those which do *not* serve to distinguish this variety from other varieties of English. Such non-distinguishing features are referred to as "common core" in Crystal and Davy (1969), so that in their approach "common

core” emerges as the result of the analysis. In Huddleston *et al.*, however, “common core” is assumed to be given in advance, like “register”, and one can only suppose that the expression is being used here in quite a different sense, to mean something like “general English”. Certainly it is not possible to take “common core” in the Crystal and Davy sense as given since it presupposes that detailed analysis has already been carried out in order to establish it.

What this suggests is that Huddleston *et al.* are not really interested in characterizing this particular variety of English but in using data from this variety, taken as given, to exemplify general categories of grammatical description. They speak of giving an account of “selected areas of the grammar of the written scientific English”. The selection appears to have been made on the basis of descriptive linguistic rather than stylistic criteria. That is to say, their focus is on those aspects of “scientific written English”, which best illustrate a general grammar of English. In consequence, with reference to the last sentence of the quotation cited above, their work makes a contribution to the study of English as a whole but by the very fact that it does so makes little if any contribution to our knowledge of this particular variety of English. Crystal and Davy observe of their own approach:

We are not concerned ... with the description of everything that goes on within a text, but only with that which can be shown to be of stylistic importance. ... To study everything would produce an undesirable conflation of the notions of stylistics and linguistics. (Crystal and Davy 1969: 60)

One can say that Huddleston *et al.* do in fact attempt to study everything, with particular reference to what is of linguistic rather than of stylistic importance, and that in consequence there is “an undesirable conflation of the notions of stylistics and linguistics”.

In both Crystal and Davy and Huddleston *et al.* what the analysis of a variety involves is the recognition of how code elements are exemplified. The difference between them is that Crystal and Davy work, as it were, from the text to the grammar and attempt to show how the incidence of certain linguistic categories distinguish it from texts of a different variety. Huddleston *et al.*, on the other hand, appear to work from the grammar to the text and focus on those linguistic properties which best illustrate the former rather than on those which characterize the latter. But in both cases the assumption is that a description of a variety of English can only be made by reference to the categories of linguistic description.

3.5.3. *The analysis of scientific English as use*

When Huddleston *et al.* speak of the “grammar of written scientific English”, then, what they mean is “the grammar of English as exemplified in written scientific prose”. But it is possible to think of the grammar of written scientific English as referring not simply to the incidence of formal elements but to the manner in which these elements function in this particular kind of discourse. This is the view taken in Lackstrom, Selinker and Trimble (1970, 1972), and it is interesting to compare their work on “scientific” or “technical” English with that of Huddleston and his associates.

Lackstrom, Selinker and Trimble point out that certain areas of grammar seem to be used in technical writing in a way which is specific to that particular variety. Thus, for example, they demonstrate that the choice of tense and aspect seems to be dependent not on time specification but on the degree of generality the writer wishes to claim for the information he is presenting:

As it happens, the present tense in technical English means “generalization” so that the present tense will occur where technical rhetoric requires the expression of this meaning. (Lackstrom *et al.* 1970: 108)

They consider the following three sentences:

A plant to convert cellulose of pine sawdust into fermentable sugar and that into ethyl alcohol failed because a sawmill couldn’t sell as much lumber as plans called for, and thereby curtailed the alcohol plant’s raw material supply.

Plants to convert cellulose of pine sawdust into fermentable sugar and that into ethyl alcohol have failed because sawmills haven’t been able to sell as much lumber as plans called for, and thereby have curtailed the alcohol plants’ raw material supply.

Plants to convert cellulose of pine sawdust into fermentable sugar and that into ethyl alcohol fail because sawmills can’t sell as much lumber as plans call for, and thereby curtail the alcohol plants’ raw material supply.

They comment:

The choice of the present, present perfect, or past tense in (1), (2), and (3) respectively is not a choice based upon the time of the ethyl-alcohol-plant failures but upon how general the author believes this phenomenon to be. To put it another way, the author will choose one or another of the tenses depending upon how many instances of ethyl-alcohol-plant failures he knows about. If he has knowledge of a large number of cases, he will use the present tense. If he knows of fewer cases, he will use the present perfect. If he knows of only one case, the past tense will be used. Here we have tense-choice based on semantic notions but semantic notions that are unrelated to time. (Lackstrom, Selinker and Trimble 1970: 109-10)

If this is a feature of tense use which is restricted to technical writing, as is suggested, then it is possible to claim that in this variety of English tense/aspect distinctions enter into a system of contrast which is different from that of other kinds of discourse and that in this respect the grammar of technical English is different from that of other varieties. The same point might be made in relation to observations made in Lackstrom, Selinker and Trimble (1972) about the use of the present and past tenses in the description of apparatus in technical writing:

We find that the tense chosen by the writer to describe apparatus used in an experiment is either in the past or present tense depending on the author’s conception of the permanent or transient nature of that apparatus. If the apparatus is regarded as temporary, perhaps devised solely for the given experiment and then removed, the description of it will be in the past tense. If, however, the apparatus is of a permanent nature and therefore exists after

the experiment is ended, the description of it will be in the present tense.

(Lackstrom, Selinker and Trimble 1972: 12)

Again, in so far as this functional distinction is systematically maintained in technical writing, and is confined to this type of discourse, we might say that it represents part of the grammar of technical English. These categories then, are of interest precisely because they do *not* have validity beyond the corpus.

But whether one wishes to speak in terms of a grammar of technical English or not (and in subsequent chapters I shall argue that it is best not to), it is clear that the kind of analysis provided by Lackstrom, Selinker and Trimble yields a much more satisfactory characterization of “scientific” or “technical” English than does that of Huddleston *et al.* It indicates not simply which code elements occur but how they function in the communication of messages, and thus points to the way in which scientific or technical English might be taught. Indeed, the work of Lackstrom, Selinker and Trimble has developed from the experience of teaching foreign engineering students at the University of Washington, so that their approach derives from a pedagogic rather than a linguistic orientation. In this respect it represents an exercise in applied linguistics in the sense defined in Chapter 1 of this study.

3.6. Variation in relation to context

To establish the different communicative or rhetorical functions of such grammatical elements as tense, articles and so on, it is of course necessary to consider them in relation to stretches of language beyond the limits of the sentence. In other words, the study of language variation which takes function into account in this way must be concerned with context. As Lackstrom *et al.* put it:

When we begin to examine purely grammatical notions in relation to technical writing and communication, in an effort to help FES (foreign engineering students) manipulate technical information in English, we are drawn from purely grammatical relationships to the attitudes and intentions of the writer and to the position of the sentence under discussion in its rhetorical relationships to the rest of the paragraph.

(Lackstrom, Selinker and Trimble 1970: 130)

Lackstrom *et al.* recognize, as Winterowd (1968), as we have seen (3.5.), appears not to do, that rhetorical variation cannot be accounted for by reference to formal properties but involves accounting for the relationship between linguistic form and communicative function in terms of the rhetorico-grammatical units of actual language use.

The work of Halliday *et al.* (1964), Crystal and Davy (1969) and Huddleston *et al.* (1968) is essentially an attempt to account for language variation by relaxing the degree of idealization to include destandardization but to exclude contextualization. This only allows for a correlational approach to the description of variation, whereby code elements are put into correspondence with certain situational factors, or, where the situational factors are assumed to be given, whereby there is a simple record made of what tokens of code element types occur. The difficulty with this approach is that such elements appear not to have a very obviously re-

stricted distribution and it is hard to say when the incidence of certain elements is significant or not, or what it is significant of. This difficulty is illustrated by the work of Labov. The “register” approach, when confronted with a feature like, for example, the deletion of the copula, or the occurrence of /t/ as the initial consonant of words like *thing*, *thick* and so on, would assign it to a situational variable – presumably, in Crystal and Davy’s scheme to “class dialect”, or perhaps “regional dialect”. As a result, these features would be associated with a certain class or regional dialect and would indeed enter into the definition of such a dialect. But Labov shows that features like these cannot be related to single factors in this straightforward way. In the case of /t/, for example, as it occurs in New York speech, he is able to show that all socio-economic class groups make use of it, as they all make use of the non-stigmatized variant /θ/, but the frequency of its use depends on the relative formality of the situation in so far as this controls the attention that is paid to speech. Thus, to put the matter simply, occurrences of this form may be related to the social class of the speaker, or to the situation in which he is speaking. As Labov puts it:

The same sociolinguistic variable is used to signal social and stylistic stratification. It may therefore be difficult to interpret any signal by itself – to distinguish, for example, a casual salesman from a careful pipefitter.
(Labov 1970: 69)

If Labov is correct, then the division that is made in Halliday *et al.* between dialect and register can no longer be maintained.

Both Halliday *et al.* and Crystal and Davy of course allow for the assignment of a linguistic feature to more than one “dimension of situational constraint”. Thus a piece of discourse might be described as formal in relation to status, lecturing in relation to modality and physics in relation to province (to use Crystal and Davy’s terminology). But one cannot in the same way say that /t/, as a realization of the sociolinguistic variable (th) is related in any instance of its occurrence to *both* lower class dialect *and* informal status. The point that Labov makes is that its occurrence might signal the class of the speaker *or* the informality of the situation. This suggests the possibility that a whole host of linguistic features are also variables of this kind and cannot be correlated neatly with situational dimensions in the way that Crystal and Davy and others have suggested. For example, it may be the case that a certain linguistic feature may signal Modality A, Province B and Status C, or Modality C, Province A and Status B or any other combination, so that it may point to either an informal note about insurance policies, or a formal letter about tourism. Labov makes a useful distinction between linguistic features which he calls *indicators* and those he calls *markers*. The former, he says

show a regular distribution over socio-economic, ethnic, or age groups, but are used by each individual in more or less the same way in any context.

Markers, on the other hand,

not only show social distribution, but also stylistic differentiation.

(Labov 1970: 67)

Extending these notions we may say that the difficulty with register analysis is that linguistic features are treated as if they were indicators and the possibility of some of them being markers is not taken into account.

What Labov's work shows, then, is the importance of noting not only that certain linguistic forms are used but the circumstances of their use, the manner in which they function to convey what Gumperz calls "social meanings". Both Labov and Lackstrom, Selinker and Trimble point to the need to take context into account and their work reveals the limitations of an approach to the description of variation which does not do so. In this chapter we have reviewed work which attempts to extend the scope of linguistic description to deal with destandardized language data without relaxing idealization further by contextualizing it. The result is a description of variation as varying usage which yields little if any insight into the nature of language as a means of communication. To account for variation as varying use we have to consider context. The next chapter is concerned with attempts to extend the scope of linguistic description by studying contextualized language data.

CHAPTER 4

EXTENDING THE SCOPE: CONTEXTUALISATION

4.1. Analysis beyond the sentence

It was pointed out in Chapter 2 (2.6.2.) that there are two different ways in which one might be said to be accounting for context. On the one hand, one may attempt to trace the manner in which sentences are linked with each other and establish what formal properties bind a piece of discourse together. On the other hand, one may attempt to establish the communicative function of sentences. The first approach deals with what we may call intra-textual relations between different linguistic forms, and the second deals with what we may call extra-textual relations between linguistic forms and the factors which determine what communicative acts they count as. The distinction I am making here parallels that made by some neo-Firthian linguists between *context*, the relation between form and situation, and *co-text*, the relation between forms within a text (see, for example, Catford 1965: 31; Ellis 1966). Although, as was argued in the previous chapter, it is the relationship between linguistic form and communicative function that is crucial to a study of language use (the neo-Firthian context rather than co-text), this chapter will be concerned with both aspects of contextualization. There are two reasons for this. Firstly, an understanding of the formal properties which give cohesion to a text is of importance to the language learner, and secondly when one is dealing with written language the factors which determine the communicative function of linguistic forms are necessarily given linguistic expression so that the distinction between co-textual and contextual features is apt to be concealed.

4.1.1. Sentences in combination: Harris

The study of discourse as sentences in combination is exemplified in the work of Harris. He begins with the observation:

Language does not occur in stray words or sentences, but in connected discourse. (Harris 1952/1964: 357)

Harris sets out to show that this connection can be described in terms of the recurrence of equivalent chains of morphemes. His procedure is first to establish equivalence classes using the information from within the text itself by investigating the grammatical environment in which chains of morphemes occur. Thus in the particular text he analyses, the following sentences occur:

Millions can't be wrong.

Four out of five people in a nationwide survey can't be wrong.

Four out of five people in a nationwide survey say they prefer X- to any hair tonic they've used.

He is able to establish two equivalence classes on the basis of this evidence, viz:

Millions

Four out of five people in a nationwide survey

and

can't be wrong
say they prefer X- to any hair tonic they've used

Up to this point, equivalence is a property of the message form and the patterning of morpheme chains is *in praesentia* in the text itself. Harris next proceeds to introduce the notion of grammatical transformation by means of which he is able to draw on information outside the text and show how morpheme chains are equivalent, *in absentia*, with reference to the code. He comments:

The information will be of the same kind as we have sought inside the text, namely whether one section of a sentence is equivalent to another ... It will go back to the same basic operation, that of comparing different sentences. And it will serve the same end: to show that two otherwise different sentences contain the same combination of equivalence classes, even though they may contain different combinations of morphemes. What is new is only that we base our equivalence not on a comparison of two sentences in the text, but on a comparison of a sentence in the text with sentences outside the text.

(Harris 1952/1964: 372-3)

Harris represents the second stage of his analysis as being similar to the first: it would appear that he regards equivalence within the text as essentially the same thing as equivalence outside the text, different only in degree and not in kind. But to gloss over the difference in this way is to confuse the patterns represented by the particular message forms of a text and the patterns that exist in the code in general. Furthermore, it of course ignores the possibility that a message form may convey information within the context of a particular piece of discourse over and above that which is carried by those syntactic features by virtue of which it is equivalent to a different message form.

It might be argued that the difference between the two kinds of equivalence is irrelevant to Harris's concern, since his aim is simply to establish formal patterns without reference to meaning. But Harris nevertheless believes that his analysis has some bearing on how discourse is understood as communication. At first sight it would appear that his aim is to contribute to studies of contextualized language in both of the senses distinguished at the beginning of this chapter. In a prolegomenon to his actual analysis he makes the comment:

One can approach discourse analysis from two types of problem, which turn out to be related. The first is the problem of continuing descriptive linguistics beyond the limits of a single sentence at a time. The other is the question of correlating "culture" and language (i.e. nonlinguistic and linguistic behavior).

(Harris 1952/1964: 356)

It turns out, however, that what Harris has in mind in the second of these problems is something very like the Hallidaian notion of register. He appears to believe that the kind of distributional analysis of morpheme sequences that he proposes will provide a basis for correlating the formal properties of different pieces of language with the social situations in which they occur. The passage in which he expresses this belief is worth quoting at length since it links up Harris

with the approach to discourse analysis which was reviewed in the previous chapter (3.3.):

... distributional analysis within one discourse at a time yields information about certain correlations of language with other behavior. The reason is that each connected discourse occurs within a particular situation – whether of a person speaking or of a conversation or of someone sitting down occasionally over a period of months to write a particular kind of book in a particular literary or scientific tradition. To be sure, this concurrence between situation and discourse does not mean that discourses occurring in similar situations must necessarily have certain formal characteristics in common, while discourses occurring in different situations must have certain formal differences. The concurrence between situation and discourse only makes it understandable, or possible, that such formal correlations should exist.

It remains to be shown as a matter of empirical fact that such formal correlations do indeed exist, that the discourses of a particular person, social group, style, or subject matter exhibit not only particular meanings (in their selection of morphemes) but also characteristic formal features. The particular selection of morphemes cannot be considered here. But the formal features of the discourses can be studied by distributional methods within the text; and the fact of their correlation with a particular type of situation gives a meaning-status to the occurrence of these formal features.

(Harris 1952/1964: 357)

It is clear from this that what Harris has in mind is the kind of large scale correlation between patterns of linguistic forms and situations that the register analysts attempt to set up. The difference between a Harris-type and a Halliday-type of analysis is that in the former the linguistic description is, as it were, holistic in that it focuses on how linguistic forms combine into patterns and then suggests a correlation between these patterns and different situations, whereas the Halliday-type analysis is atomistic in that the correlations are between individual linguistic features and features of the situation. To put it another way, register analysis of the type discussed in the previous chapter attempts to account for destandardized language data without taking context into consideration, whereas Harris proposes that one might account for destandardized language data by taking into consideration that aspect of context which has to do with the manner in which sentences combine. Neither of them are concerned with contextualization which has to do with the communicative function of linguistic forms.

Harris himself recognizes the limited scope of his analysis. Having pointed out that it promises to provide a way of characterizing the structure of a piece of discourse and of revealing covert patterns of language, he adds:

All this, however, is still distinct from an INTERPRETATION of the findings, which must take the meanings of the morphemes into consideration and ask what the author was about when he produced the text. Such interpretation is obviously quite separate from the formal findings, although it may follow closely in the directions which the formal findings indicate.

(Harris 1952/1964: 382)

4.1.2. *The use of sentences: Labov*

The implication here is that an understanding of discourse as communication may be dependent on a prior formal account of its linguistic structure, that contextualization in the second of the senses defined earlier in this chapter can develop from contextualization in the first of its senses. What we seem to have here is a kind of pre-echo of the transformational-generative grammarian's belief that the study of what sentences count as when performed in acts of communication can only profitably be undertaken on the basis of a study of their formal properties. Thus, for example, Chomsky:

There seems to be little reason to question the traditional view that investigation of performance will proceed only so far as understanding of underlying competence permits. (Chomsky 1965: 10)

The notion that a study of language use is logically dependent on the study of language system has been questioned by Hymes (1970) and Labov (1970), among others. It is particularly interesting, in the light of Harris's apparent belief in the primacy of formal analysis as expressed in the quotation cited above, that Labov should point to discourse analysis as being the very area of enquiry where such primacy cannot be established:

There are some areas of linguistic analysis in which even the first steps towards the basic invariant rules (i.e. of the language system or *langue* – my comment) cannot be taken unless the social context of the speech event is considered. The most striking examples are in the analysis of discourse. (Labov 1970: 79)

Since Harris has taken a considerable number of steps in the description of discourse, the question naturally arises as to how he has managed to do this without considering speech events and social contexts at all, even though, as we have seen, he acknowledges that his description should bear upon the problem of how language is understood in social situations.

The answer to this question is, of course, that whereas Harris conceives of discourse as contextualized language data in one of the senses we have distinguished, Labov thinks of it as contextualized language data in the other sense. Harris looks for patterns of linguistic elements which link sentences together into a larger formal structure, and Labov looks at the way linguistic elements are used to perform communicative acts, and this kind of enquiry takes him outside the actual linguistic properties of the text not, as with Harris, to the linguistic properties of the code but to the extra-linguistic factors of the social situation. Labov's emphasis, therefore, is on the performance of social actions rather than on the incidence of linguistic forms:

Commands and refusals are actions; declaratives, interrogatives, imperatives are linguistic categories – things that are said, rather than things that are done. The rules we need will show how things are done with words and how one interprets these utterances as actions: in other words, relating what is done to what is said and what is said to what is done. This area of linguistics can be called 'discourse analysis'; but it is not well-known or developed. Linguistic theory is not yet rich enough to write such rules, for one must

take into account such sociological non-linguistic categories as roles, rights and obligations. (Labov 1969: 54-5)

Harris's work, well-known though it is, is not mentioned here, and it is clear that by Labov's definition it has nothing to do with discourse analysis at all. It may be, of course, that Labov is thinking of *spoken* discourse, whereas Harris's work is concerned with written language, but it would be most unsatisfactory to associate discourse in the Labov sense only with spoken language and to assume that written language could not be characterized as communication in terms of social actions. As was suggested earlier in this chapter (4.1.), it is true that it is more difficult in written language to separate 'what is said' from 'what is done', since the non-linguistic categories which Labov refers to are commonly given linguistic expression in context, but for them to be recognized as discourse features, in Labov's sense, one has still to see them as expressions of actions rather than as exemplifications of linguistic categories.

4.1.3. *Text analysis and discourse analysis*

It seems clear, then, that we are confronted here with two quite different kinds of enquiry both contending for the same name. A terminological distinction seems to be called for. The kind of investigation carried out by Harris into the formal structure of a piece of language might be called *text analysis*. Its purpose is to discover the patterning of linguistic elements beyond the limit of the sentence, and what it is that provides a text with its *cohesion*. Thus what Harris calls "discourse analysis" will be referred to as "text analysis". One is to some degree justified in thus taking liberties with Harris's terminology by the fact that Harris himself appears to use the terms 'text' and 'discourse' interchangeably, as for example, in the following quotation:

The formal features of the discourses can be studied by distributional methods within the text. (Harris 1952/1964: 357)

We may now use the term *discourse analysis* to refer to the kind of investigation proposed by Labov into the way linguistic elements are put to communicative use in the performing of social actions. Its purpose is to discover what sentences count as utterances and what it is that provides a discourse with its *coherence* as a piece of communication. Thus text analysis is concerned with contextualization in the first of the senses defined at the beginning of the present chapter, and discourse analysis with contextualization in the second of these senses. The distinction also relates to the difference between syntactics and semantics on the one hand and pragmatics on the other (Morris 1938; Cherry 1966), and this relationship will be discussed in detail in the following chapters. In this chapter I shall review some of the work that has been done in both text and discourse analysis, assess its potential for the pedagogic purpose we have in mind in this study, and finally suggest how this work might be developed further towards a more satisfactory characterization of language use, and one which might serve as a basis for the preparation of teaching materials. What is suggested in this chapter is explored in detail in those which follow.

4.2. Text analysis

As we have seen (4.1.1), Harris begins his enquiry with the observation:

Language does not occur in stray words or sentences, but in connected discourse ... Arbitrary conglomerations of sentences are indeed of no interest except as a check on grammatical descriptions. (Harris 1952/1964: 357)

This quotation from Harris might have served as a rubric for the work represented in Hasan (1968). Like Harris, Hasan's purpose is to establish what it is that distinguishes a text from a random collection of sentences:

In this paper we shall attempt to identify some of the features which distinguish a text from a disconnected set of sentences, in order to try and establish what it is that determines that a passage of English forms a text. (Hasan 1968: 2)

It is these features which provide a text with its cohesion: Hasan uses this term in the sense in which it has been defined above:

It is the internal, linguistic features characterizing a text, and distinguishing it from an agglomeration of sentences, that we are here referring to under the name of 'cohesion'. (Hasan 1968: 8)

It is clear from these quotations that Hasan's work falls squarely into the area of text analysis as we have defined it. More particularly she is concerned with grammatical cohesion in the narrow sense of "grammatical" which excludes phonological and lexical structure, and of the four kinds of grammatical cohesion which are distinguished, only the first two: reference and substitution are in fact dealt with in her paper. This restriction of scope to grammatical features, and the subsequent division into types which, as she herself acknowledges, do not represent "sharply distinct" categories results in a somewhat atomistic and fragmentary presentation of facts which is at variance with the notion of cohesion that they are meant to illustrate. Essentially what we have is a partial taxonomy of cohesive devices abundantly illustrated with examples which, though useful as a reference, does not show how the different devices are differentially used, how they relate with each other and with lexical cohesion to create a text. Thus the exemplification which is provided generally takes the form of pieces of text consisting of two sentences linked by the particular device which is under discussion. What we do not get is an analysis of a text in terms of the different types of cohesion that operate in it: Hasan's approach is to adduce bits of text as evidence for individual categories of grammatical cohesion rather than to adduce different categories from a representative text, to show how it is the manner in which they relate that makes the constituent sentences hang together.

4.2.1. Grammatical and lexical cohesion

Hasan, then, does not begin with the text but with the code. Having selected the grammatical level of analysis, she then proceeds to show which elements from this level fulfil a cohesive function. But this prevents her making any comparison with the manner in which elements from a different level might fulfil a similar function. We might compare her approach with that of Hilyer (1970). Instead of fixing

on grammatical cohesion and then setting up different categories of cohesion, Hilyer, fixing on a category first, proceeds to show how this category is realized by both grammatical and lexical elements. His cohesive category is that of reference, and he distinguishes between lexical reference and pronominal reference and attempts to discover what conditions within the text control whether one is used as opposed to the other. It appeared, for example, that in the particular text that he was examining lexical reference occurs after between 3 and 5 occurrences of a pronominal reference relating to the same referent, and immediately following the interposing of a lexical reference relating to a different referent. Hasan cannot provide us with information like this as to how the different cohesive devices she lists are actually used in the creation of texts: all we have is a statement as to which devices of a grammatical kind are available for use.

The difficulty of describing how cohesion works in terms of one level of linguistic description is further illustrated in Morgan (1967). In his study of speeches and news broadcasts, Morgan points to the importance of recognizing that the grammatical devices which serve to link up sentences are commonly reinforced by lexical cohesion. Thus, for example, he discusses four basic devices of lexical connection which demonstrate an inter-relationship of lexical and grammatical structure. The first of these is where there is a “repetition of the identical lexical syntagmeme and its grammatical manifestation”, an example of which would be:

Mrs. Brown made dilly bread.

Mrs. Brown made dilly bread like no one else.

The second device is where there is a “change of level of abstraction of the same lexical syntagmeme with retention of the same grammatical syntagmeme.” (Morgan 1967: 229). The following is given as an illustration of this particular device:

Mrs. Mary Brown baked bread four times a week.

Mrs. Brown prepared the special recipes for neighbours ...

This little woman turned out four batches each Monday ...

She always *made it* in the morning.

She did *this* because ...

It provided another means of income.

The third device is the reverse of the second in that it consists of the “retention of level of abstraction of the same lexical syntagmeme with a change of manifesting grammatical syntagmeme.” (Morgan 1967: 130).

Examples of this:

Back home *Mrs. Mary Brown baked bread* fresh 4 times a week.

It was a highlight of the day for *Mrs. Brown to bake bread*.

Finally, we can have a “change both of the level of abstraction of the same lexical

syntagmeme and of the manifesting grammatical syntagmeme,” as, for example in the following:

Back home *Mrs. Mary Brown baked bread* 4 times a week.
Her baking it was a highlight of the day.

What Morgan shows, then, is that it is necessary to take both lexical and grammatical structures into account when considering how sentences link up with each other to form text since cohesion comes about as a result of the combination of these structures in different ways. Morgan concludes:

The interlocking of the lexical and grammatical structures here certainly suggests that *simultaneous study* of the lexical and grammatical hierarchies is necessary to describe accurately the structure of discourse.

(Morgan 1967: 131; my emphasis)

The limitations of Hasan’s approach might be said to arise because her concentration on grammatical devices precludes such a simultaneous study. It should be noted, however, that several of the features which are considered as grammatical in Hasan are given lexical status in Morgan. The pronoun *she*, for example, is linked in Morgan with the expressions *Mrs. Brown* and *This little woman* as representing a more abstract lexical level. What Morgan considers as grammatical cohesive devices are quite different from those of Hasan. Among these, for example, he lists conjunctions like *and*, *but*, *or* and *yet*, “sentence connectors” like *therefore*, *however*, *for example*, and “subordinators” like *because*, *for*, *since*. These devices are grouped into one category, which Morgan calls “function words and phrases”. Another category is that of “sentence modifiers”, of which the following are examples:

Last week ...
In each case ...
Among the hopeful signs ...

Morgan points out that expressions of this kind are fillers of different slots at two different levels simultaneously. At the sentence level they function as expressions of time, place and so on and thus fill the adjunct slot, but at the paragraph level they fulfil a sequence function, so that when they occur in initial position they operate like sentence connectors.

4.2.2. Cohesion by equivalence and combination

This observation by Morgan points to the distinction between the kind of grammatical cohesion that he has in mind and that which is discussed in Hasan (1968). Hasan’s cohesive devices are predominantly pro-forms of one kind or another and they serve to link sentences together through the relation of *equivalence*. The kind of grammatical devices which Morgan discusses are those which serve to link structures together in a relation of *combination*, whereas equivalence is dealt with in terms of the interlocking lexical and grammatical structures which were dis-

cussed earlier. It would appear from this that it might therefore be more profitable to consider cohesion not in terms of different levels of linguistic description – grammatical, lexical, phonological – but in terms of the two basic dimensions of linguistic organization – paradigmatic and syntagmatic. In this way it is meaningful to extend the principles of linguistic description beyond the limit of the sentence. One can study the structure of text paradigmatically by tracing the manner in which the constituent linguistic elements are related along the axis of equivalence, or one can study it syntagmatically by tracing the manner in which the linguistic elements are related along the axis of combination. By taking the former course, one recognizes pronouns and other pro-forms as cohesive devices, and by taking the latter course, it is such forms as sentences connectors and the thematic arrangements of sentences constituents which emerge as the principal features of cohesion.

Winburne (1962) provides an interesting example of a study of cohesion in terms of equivalence. He takes Abraham Lincoln's Gettysburg Address as data and begins by observing that there is a semantic relationship between certain words occurring in adjacent sentences or in sentences separated by only one other sentence. This semantic relationship may take one of the following forms: firstly, the words may be identical; secondly, they may vary only in respect to their morphological shape (as with *dedicate/dedicated*); thirdly they may be synonyms (as with *battlefield/field*); and fourthly they may be semantic, though not necessarily syntactic substitutes (as with *battlefield/here*). Winburne then introduces the notion of a "senseme" which is an abstract unit of sense, or meaning, variously realized by words semantically related in the way outlined above. Hence, therefore, *field* and *battlefield* would be members of one senseme, would be "allosenses" in fact, and *dedicate* and *dedicated* would be allosenses of a different senseme. To use Morgan's terms, then, Winburne is ignoring both the difference of level of lexical abstraction and the difference of grammatical manifestation. His concern is simply with the semantic equivalences which occur in the text.

Having defined a senseme, Winburne then divides sensemes into two classes: A and B. A sensemes are those which occur frequently and regularly within the text, and B sensemes are those which do not, or as Winburne puts it:

The senseme whose allosenses appear most often and with regularity according to the factor [allosense/senseme ratio + frequency and range of occurrence] are Senseme A; and those allosenses recurring irregularly and less often are Senseme B.
(Winburne 1962: 434)

In other words, it is through the occurrences of the allosenses of Senseme A that cohesion through equivalence is created:

Sensemes A of any exposition appear to be the principal meanings of that discourse. And it may be deduced that Sensemes A produce the effect in discourse commonly called unity or that they provide cohesion for discourse.
(Winburne 1962: 434)

What is implied here is that the B type sensemes, being irregularly and infrequently realized in the text, do not contribute to cohesion. But although they do not serve to link up parts of the text in a paradigmatic fashion in terms of equivalence,

lence, they are nevertheless represented as having a linking function in that they are said to provide for the syntagmatic development of the text:

Senseemes B being introduced as the discourse progresses also appear to cause it to progress; that is, the introduction of senseemes after discourse is initiated causes the discourse to advance. (Winburne 1962: 434)

It may well be the case that in the particular text which Winburne chooses to analyse it is cohesion by equivalence rather than cohesion by combination which predominates. Jakobson has suggested that it might be possible to classify types of textual development in accordance with whether it is equivalence or combination which predominates, and coins the terms *metaphoric* and *metonymic* to distinguish the two types:

The development of a discourse may take place along two different semantic lines: one topic may lead to another either through their similarity or through their contiguity. The *metaphoric* way would be the most appropriate term for the first case and the *metonymic* way for the second, since they find their most condensed expression in metaphor and metonymy respectively. (Jakobson and Halle 1956: 76)

One might say, then, that in the particular data that Winburne treats it is the metaphoric mode of development which is followed, but this does not mean that all texts are structured in this way, as he in fact suggests:

The basis of discourse structure is verbal, phonological, grammatical or musical repetition. (Winburne 1962: 431)

Contiguity links must also be present, at least in most kinds of discourse. But in some kinds of discourse they may have less of a cohesive function. Winburne divides discourse into four major types: exposition, poetry, dialogue and song, and offers his analysis as an example of how the first of these is structured. But there is no reason for supposing that the way a formal speech is structured should parallel the way in which, say, a description of historical events, or a scientific explanation are structured. Indeed, there is reason to suppose that a formal speech such as Lincoln's Gettysburg Address has more in common with poetry than with exposition as one generally understands that term. Leech (1965) and Levin (1964), for example, both show how equivalence predominates in the creation of cohesion in poetic texts. Levin's work also links up with that of Morgan (1967) in that he shows how cohesion is brought about by the interlocking of lexical and grammatical structures.

It is interesting to compare the distinction that has been made above between cohesion through equivalence and cohesion through combination, or, in Jakobson's terms metaphoric and metonymic modes of cohesion, with the categories set up in Halliday (1962). Like Hasan, Halliday makes his primary distinction between grammar and lexis, and his scheme is as follows:

Categories of cohesion:

A. *Grammatical*

1. structural:
 - a) binding (subordination)
 - b) linking (co-ordination)
2. non-structural:
 - a) anaphora – deictics, pronouns etc.
 - b) substitution – verbal, nominal

B. *Lexical*

1. Repetition
2. Occurrence of item in the same lexical set.

Halliday's "structural cohesion" corresponds with my cohesion through combination and is illustrated by Morgan's sentence modifiers and sentence connectors, discussed earlier in this chapter. It is also illustrated by Halliday's own later work on what he calls "textuality" (Halliday 1967-68, 1970) and by the Prague School work on Functional Sentence Perspective, both of which will be discussed later in this chapter (4.3.). "Non-structural" grammatical cohesion is studied in Hasan (1968) and, as we have seen, falls within the area of what I have called cohesion by equivalence. But although Halliday makes an equivalence/combination distinction in relation to grammatical cohesion, his lexical cohesion relates only to equivalence. The question arises as to whether it is possible to have cohesion through combination in lexis to correspond with cohesion through combination in grammar, whether, in other words, there is not a structural *lexical* means of cohesion to match the structural grammatical one.

4.2.3. *Lexical combination*

Lexical cohesion, in Halliday's scheme, involves the occurrence of lexical items in the same *set*, repetition being simply a special case of this. In Firthian linguistics, the syntagmatic notion upon which this paradigmatic notion depends is *collocation* (see Firth, 1957, Ch. 15 *passim*) and it is rather surprising that it is not invoked by Halliday within his categories of cohesion, since the concept of *set* is in fact logically dependent upon it:

A lexical set is simply a grouping of items which have a similar range of collocation. (Halliday *et al.* 1964: 33)

Range is taken to be the structural organization of language at the lexical level which corresponds to syntactic patterns at the grammatical level (McIntosh 1966). It is true that collocation has generally been discussed in relation to lexical patterns within the sentence: and in fact Robins defines it explicitly as having to do with intra-sentential relations:

By collocation is meant the habitual association of a word in a language with other particular words *in sentences*. (Robins 1964: 67; my emphasis)

But there seems no reason why ranges should not be established across sentences and so serve to combine them into text, for, as McIntosh puts it:

For the assessment of a collocation in the last resort involves in one way or another all other lexical items in the context, and there is scarcely a limit to the remove at which these may affect our interpretation of the word we happen to be specially preoccupied with.

(McIntosh 1966: 191; my emphasis)

It is the possibility of ranges extending beyond syntactic units which in fact distinguishes the concept of collocation from the transformational-generative concept of selectional restriction (cf. Chomsky 1965). Since patterns and ranges, as defined in McIntosh (1966), are distinct kinds of linguistic organization, there is no reason, in principle, for a restriction of the latter to the domains of the former. On the contrary, one would expect collocational range to extend over sentence boundaries and therefore to serve an important function in textual cohesion.

Two further points might perhaps be made about collocation and its relevance to text analysis. The first is that although the notion has been much discussed (see Firth 1957; Palmer 1968; Halliday 1961, 1966; McIntosh 1966; Robins 1964, 1967; Sinclair 1966) its application to actual analysis does not appear to have yielded very satisfactory results (see van Buren 1968). The examples that are generally given tend to be rather obvious ones, not drawn from actual texts, where the relationship between the lexical items cited are either idiomatic or highly predictable. What it would be of interest to know is how one might set about establishing range of collocation beyond the immediate environment represented by the sentence, which, as was pointed out earlier, is in principle irrelevant to lexical structure. As has been argued, the notion of collocation ought to be relevant to text analysis as the lexical analogue to what Halliday calls “structural” grammatical cohesion, but as far as I am aware this relevance has yet to be satisfactorily established in practice.*

The second point relates to the observation made above about Winburne’s analysis of Lincoln’s Gettysburg Address. How far are collocational ranges a general property of text and how far are they a particular property of a particular text? Winburne shows us how Lincoln’s address is structured in terms of senseemes and then extrapolates to represent his analysis as applicable to what he calls “exposition” as a whole. Reasons were given why one might wish to question the validity of such an extrapolation. The same difficulty arises with collocation. Robins, for example, seems to suggest that it is possible to establish certain general rules for collocability. For the majority of words, he says:

... it is possible to set up collocational ranges of words with which given words will be found associated in their various grammatical constructions.

(Robins 1964: 68)

But at the same time he acknowledges that compared to grammatical classes “collocations are far more personally variable among speakers of a single dialect”, and that “Sometimes different styles, types of utterance appropriate to specific types of situation are characterized by different collocations.” (Robins 1964: 69). As examples of the latter observation he cites *we’ve had a nice time today and we*

* Although I have not been able to refer to Sinclair, Jones and Daley (1970).

have here a nice point to decide. What it would be of interest to know is how far one can extend the range beyond contiguous words and take into account what Firth called “extended collocations” (Palmer 1968: 181). Certainly Firth himself appeared to believe that collocations could characterize different “registers”, or, to use his own term “restricted languages”:

Statements of meaning at the collocational level may be made for the *pivotal* or *key words* of any *restricted language* being studied. Such collocations will often be found to be characteristic and help justify the restriction of the field. The words under study will be found in ‘set’ company and find their places in the ‘ordered’ collocations.

(Palmer 1968: 180) (Firth’s emphasis)

But apart from such pairs as *nice/time* and *nice/point*, or *heart/bid* and *heart/beat*, *mix/well* and *mixes/well* (Halliday *et al.* 1964: 87-88) how does collocation actually operate in characterizing a particular type of text? Firth also speaks of “The collocational study of selected words in *everyday* language ...” (Palmer 1968: 180; my emphasis) and of “habitual or customary places” of words. Does this mean that there are certain general ranges of collocational relations which are discoverable in all texts and that the more particular ranges are discoverable by contrast to these? There are studies (Lehrer (1969); Taylor (1968) for example) which suggest that some varieties of English at least might be characterized in terms of lexical structure. Lehrer adopts the Firthian notion of universe of discourse:

The notion of ‘universe of discourse’ is relevant to semantic analysis in that certain lexical items contrast paradigmatically in some fields but not in others.

(Lehrer 1969: 40)

It would presumably follow that the collocational ranges of these items would be different in one universe of discourse than in another and that the difference would serve to characterize a particular language variety, and to provide in some measure for the cohesion of a representative text. In fact, neither Lehrer nor Taylor are concerned with collocations as such: neither followed the procedure suggested by Firth:

In the study of selected words, compounds and phrases in a restricted language for which there are restricted texts, an exhaustive collection of collocations must first be made. It will then be found that meaning by collocation will suggest a small number of groups of collocations for each word studied. The next step is the choice of definitions for meanings suggested by the groups.

(Palmer 1968: 181)

Certainly the work of Lehrer and Taylor does not fall within the study of collocation as described in this quotation, and I am not aware of any other work which relates to the discovery of collocational range either as it is manifested in particular varieties of language or as a “common core” feature of language as a whole, although there is reference to work of this kind in Sinclair (1966) and Van Buren (1968).

It is, I think, fair to conclude that although in principle the notion of collocation has potential value for the study of cohesion, this potential appears in practice not to have been realized.

4.2.4. Grammatical combination

From collocation we now turn to colligation (to use another Firthian term) and consider grammatical cohesion of the structural type or, as I have put it earlier in this chapter, cohesion through combination by grammatical means. As has already been noted (4.2.1.), Morgan (1967) points out that among the devices used for connecting up sentences are what he calls “function words and phrases”, including “conjunctions”, “sentence connectors” and “subordinators”, and what he calls “sentence modifiers” occurring initially in the sentence. On the basis of this we might distinguish two kinds of structural cohesion. The first is effected by the use of “function words” and it is this which is discussed by Winter under the heading: *Some Aspects of Cohesion* (Huddleston *et al.* 1968). Winter divides up what he calls “sentence-adjuncts” into different classes as follows:

| | |
|---------------------|---|
| Logical sequence | (e.g. <i>thus, therefore</i>) |
| Contrast | (e.g. <i>however, nevertheless</i>) |
| Combination | (e.g. <i>furthermore</i>) |
| Doubt and Certainty | (e.g. <i>probably, certainly</i>) |
| Expansion | (e.g. <i>for example, in particular, in general</i>) |
| Alternation | (e.g. <i>alternatively</i>) |
| Correlative pairs | (e.g. <i>on the one hand ... on the other</i>) |
| Miscellaneous | |

He comments:

All the sentence-adjuncts discussed here, except those of Doubt and Certainty, are anaphoric; for instance, *therefore* refers back to some previous clause (or larger item) as the reason or cause for the piece of information with which it is associated. Thus the function of anaphoric sentence-adjuncts is to relate the clauses containing them to earlier clauses.
(Huddleston *et al.* 1968: 574)

The cohesive function of sentence-adjuncts derives from the fact that their occurrence in a sentence automatically links that sentence with one preceding. The distinction which Winter makes between different classes of adjunct is made on the basis of the *kind* of link which is made, that is to say in terms of communicative function. As was pointed out in the previous chapter (3.6.2.), there is a confusion of criteria here: sentence-adjuncts are defined as syntactic units by reference to formal criteria and then sub-divided into classes by reference to communicative functional criteria. Once we move into a consideration of communicative function, we move into discourse analysis, in the sense defined earlier in this chapter. Thus when we say that these forms are anaphoric and label them as sentence connectives, or sentence linkers or conjuncts (Greenbaum 1968) one is referring to their *textual* function as cohesive devices. When one speaks of certain

of these forms as having to do with logical sequence or contrast, then one is referring to a relationship between different kinds of statement which may be mediated by these forms but need not be, and then what is being discussed is their *discourse* function. The distinction may be made clear by considering other remarks by Winter, this time from Winter (1971):

In any continuous discourse, it is the outer-clause relations (i.e. relations between sentences) that provide the semantic structuring whereby its individual sentences are understood: that is, the understanding of the information of one sentence depends in some way on the understanding of the other individual sentences which form the outer-clause relation. A study of what constitutes these relations is therefore important. Although these relations are largely left implicit it is convenient to begin by examining those outer-clause relations which have been made explicit by means of sentence connectives. (Winter 1971: 42)

The understanding of an individual *sentence* does not depend on the kind of connection mediated by a sentence adjunct but the understanding of what kind of *statement* the sentence counts as in that context. If the relation between two statements is not made explicit by the use of a connective, then there is no cohesion between the sentences which are used to make the statements. Winter gives the following as an example of the operation of the “contrast sentence adjunct” *however*:

He liked the French visitors. She, however, would have nothing to do with them.

Here there is cohesion between the two sentences because of the occurrence of *however* and of the pronominal *them* (an example of what Hasan (1968) calls ‘reference’). If we were to remove the former we would have:

He liked the French visitors. She would have nothing to do with them.

Here the two sentences are linked only by *them*, and we have no difficulty in understanding their meaning as sentences. What is difficult, and in fact in this case impossible, is understanding how the two sentences are related as statements. In other words, we have no problem about the semantic meaning of these sentences, but we have a problem about the pragmatic meaning of their use. The pragmatic relations between the two statements might be made evident by a consideration of the context without recourse to an explicit sentence adjunct. Thus we can have coherence without cohesion. Inserting a sentence-adjunct establishes cohesion and at the same time makes the nature of the coherence explicit, so that we might have:

He liked the French visitors. She, however, would have nothing to do with them.
He liked the French visitors. She, therefore, would have nothing to do with them.

and perhaps other relations. Cohesion of this kind, then, is a sufficient but not a necessary condition on coherence. In other words, there does not have to be a semantic link between sentences for there to be a pragmatic link between statements.

This point will be taken up again later (4.3. and 4.4.3.), but meanwhile we have to consider the second kind of structural cohesion. This is brought about not by the occurrence of a particular type of linguistic element but by the manner in which the constituents of the sentence are arranged. As we have seen, Morgan points out that expressions like *Last week ...* and *In each case ...* serve to link sentences when they occur initially. It is not the actual occurrence of these forms that makes for cohesion but their position in the sentence. To put it another way, the choice of one surface form will have the effect of combining two sentences into a text whereas the choice of a different one will not. Halliday, for example, points out that although the following sentence pairs express the same “experiential” meaning (i.e. have the same deep structure), only the second of them constitutes a text:

No-one else had known where the entrance to the cave was situated. What John discovered was the cave.

No-one else had known where the entrance to the cave was situated. The one who discovered the cave was John. (Halliday 1968: 210)

Halliday discusses at length the system of options available in the grammar whereby a particular surface form may be selected in which the information is organized in such a way as to fit in with what has preceded in the text. Hence what the transformational-generative grammarians tend to dismiss as simply “stylistic variation” is seen by Halliday to constitute a separate component in the grammar. This “discoursal component”

... meets the basic requirement of every language that it should be able to create texts. The speaker of a language can recognize a text; his ability to discriminate between a random string of sentences and one forming a discourse is due to the inherent texture in the language and to his awareness of it. One aspect of the discourse function is thus ‘grammar above the sentence’, the area often known as ‘discourse structure’ and concerned with options that are available to the speaker for relating one sentence to another. But the discoursal function of language embodies also the means whereby what is said may be structured as a piece of communication, and this involves grammar below the sentence. The construction of discourse demands resources not only for attaching a sentence to what has preceded it but also for organizing the sentence in such a way that it is appropriate as information in the context. (Halliday 1968: 210)

Halliday appears to be making a distinction here between sentence connection and the organization of language “as a piece of communication”, and it is pertinent to ask whether this distinction corresponds to that which has been made in this chapter between text cohesion and discourse coherence. How far is Halliday’s discussion of “theme” related to text analysis and how far is it related to discourse analysis?

4.3. Thematic organization in text and discourse

We might note to begin with that the distinction that Halliday appears to be drawing in the quotation cited above is not marked by the terminological distinction that I have been making. Like Harris (see 4.1.3. above) Halliday uses the terms “text” and “discourse” interchangeably, and in Halliday (1970a) the term “discoursal component” has been replaced, without comment, with the term “textual component”. The absence of terminological consistency has, I think, some significance. Halliday sees the manner in which pieces of language are organized as messages in terms of syntactic functions and describes them as “the grammar of discourse” (Halliday 1967: 199). Thus although he speaks of the communicative functions of language, his interest is in the manner in which these functions are reflected in the system of the language itself and not in the way that they are actually realized in acts of speech. The question that he sets out to consider is not: “How is language used in the business of actual communication?” but “Why is language as it is?” (Halliday 1970: 141). As Halliday himself points out, the kind of enquiry that results in a classification of linguistic functions like Bühler’s into representational, expressive and conative, or Malinowski’s into magical and pragmatic, will not throw light on the question with which he is concerned:

A purely extrinsic account of linguistic functions, one which is not based on an analysis of linguistic structure, will not answer the question; we cannot explain language by simply listing its uses, and such a list could in any case be prolonged indefinitely. (Halliday 1970: 141)

It is emphatically the analysis of the linguistic system with which Halliday is concerned, and communicative function is conceived of as an intrinsic property of the language system and not as having to do with the extrinsic conditions of its use. This is again brought out in the following remarks. The kind of functions distinguished by Bühler and Malinowski

can be couched in various terms, psychological or cultural-situational, and with varying degrees of differentiation; they are conceived of, in general, as uses of the language system, rather than as properties of the system as such. Yet this plurality of language function is reflected in the system, and different parts of the system realize different functions. (Halliday 1968: 207)

Since Halliday is concerned exclusively with the formal properties of language, what he has to say relates to text and not to discourse. The latter is an instance of the use of the language system and is described in terms of the whole range of functions that language can fulfil, and not only in terms of that which is reflected in the systems that make up Halliday’s “textual” or “discoursal” component. This component has the grammatical function of creating texts. But what, we might ask, is the function of the texts? The answer is, of course, that the function of texts is to realize discourse: they do not exist independently as exercises in linguistic structure.

As was the case with the sentence connectors discussed in Huddleston *et al.* (1968) and Winter (1971), it will often happen, of course, that the linguistic features which Halliday distinguishes will make an immediate contribution to discourse coherence. It does not follow, however, that coherence is dependent upon

these cohesive devices. Consider, for example, the pairs of sentences quoted earlier:

*No-one else had known where the entrance to the cave was situated.
What John discovered was the cave.*

No-one else had known where the entrance to the cave was situated. The one who discovered the cave was John.

In terms of the systems that constitute the “discoursal” component of the grammar, the first of these pairs does not cohere to create a text, whereas the second pair does. But although, by reference to formal properties the first pair are not linked as sentences, it is not difficult to demonstrate that they could represent statements which are linked by coherence as parts of discourse. Let us suppose, for example, that these sentences are used in a discussion about the nature of John’s discovery, and that there is some argument as to whether John discovered the cave or, let us say, a druidical rocking stone near its entrance. In answer to someone who insisted that it was the latter that John discovered I might say:

Everybody knew where the rocking stone was situated. No-one knew where the entrance to the cave was situated. What John discovered was the cave.

Here the last sentence is used to make some kind of logical deduction to persuade my interlocutor that it was not the rocking stone that John discovered but the cave. In this context the two sentences which in Halliday’s terms do not constitute a text do cohere as statements in discourse, and if we were to replace the last sentence with:

The one who discovered the cave was John.

then there would be textual cohesion between the last sentence and the one which precedes it, but as utterances they would not make sense: there would be no discourse coherence.

The way in which sentences are used to create coherent discourse cannot therefore be captured by postulating intrinsic grammatical functions. It is possible to produce language which is cohesive as text without being coherent as discourse and vice-versa. This is not to say that there is no correspondence between them: very often, and particularly in written language, there might be a very close correspondence between cohesion and coherence. But they remain two different aspects of linguistic organization: cohesion is the link between sentences, and coherence the link between the communicative acts which the sentences perform. The kinds of thematic arrangement that Halliday discusses can be interpreted as discourse phenomena and considered along with other factors which contribute to coherence. This is the way “theme” is treated in Chapter 8 of this study where I shall deal with general conditions which control the *use* of different thematic arrangements together with those which control the use of other forms which must be considered as “cognitively” or “experientially” equivalent.

4.3.1. Functional sentence perspective

As Halliday has frequently pointed out, the functional approach to linguistic description is a particular feature of the Prague School orientation to the study of language. It is a matter of some interest, therefore, to consider how this approach differs, if indeed it does differ, from that of Halliday. The Prague notion of Functional Sentence Perspective (FSP) has to do with the manner in which the components of a sentence are organized as a message, and it might appear at first sight that Halliday's "discoursal" or "textual" component is simply a restatement of this notion. Halliday himself however indicates the essential difference. In Halliday (1970b) he points out that his three components of grammar: the experiential, the interpersonal and the textual correspond to the three levels within syntax postulated in Danes (1964). These are:

- 1) the level of the semantic structure of the sentence.
- 2) the level of the grammatical structure of the sentence.
- 3) the level of the organization of the utterance.

What we must notice is that the third level is concerned with the utterance and not with the sentence. For Danes, as for other scholars in the Prague tradition, functional sentence perspective has to do with the organization of the utterance as a "communicative unit", and a feature therefore of *parole*. For Halliday, the organizational level of analysis has to do with *langue*, with the system and not with its use. The way in which language is organized in message units is "intrinsic to language and thus instrumental not autonomous. ... It is an integral component of the language system, and represents a part of the meaning potential of this system." (Halliday 1970b: 4) The emphasis in Prague School discussions on functional sentence perspective is on actual realization rather than on potential. As Danes puts it, Functional Sentence Perspective is concerned with:

How the grammatical and semantic structures function *in the very act of communication*.
(Danes 1964: 227; my emphasis)

It follows from their interest in how semantic and grammatical resources are actually realized in the making of messages that Prague School scholars stress the importance of context. One way of putting the difference between Halliday's textual component and FSP is to say that whereas the former creates context, or provides the necessary conditions for context to exist, the latter is itself conditioned by context. FSP is not describable in terms of fixed systems of the Hallidayan kind because it is an essentially dynamic phenomenon. This is clear from Firbas' concept of "communicative dynamism" (CD). As he puts it:

It (i.e. CD) is based on the fact that linguistic communication is not a static, but a dynamic phenomenon. By CD I understand a property of communication, displayed in the course of the development of the information to be conveyed and consisting in advancing this development. By the degree of CD carried by a linguistic element, I understand the extent to which the element contributes to the development of the communication, to which, as it were, it 'pushes the communication forward'.
(Firbas 1972: 78)

The degree of CD, unlike Halliday's distribution of information into given/new or theme/rheme elements, is dependent on context. That is to say it is not possible to decide on which linguistic elements will carry the highest degree of CD in a particular sentence irrespective of the relationship that the sentence contracts with others. If the sentence is "contextually independent" its information structure in terms of CD will not be the same as when it is "contextually dependent". Thus CD cannot be assessed by reference simply to linear organization:

... elements become contextually dependent and in consequence carriers of the lowest degrees of CD owing to the operation of the context. They assume this function *irrespective of the positions they occupy within the linear arrangement* ... Strictly speaking, contextual dependence or independence is determined by what I have called the narrow scene, i.e. in fact the very purpose of the communication. (Firbas 1972: 79; my emphasis)

The positioning of linguistic elements, then, is only one factor which effects the way a sentence functions as a message and the way, therefore, it links up with other sentences. Other determinants are the context, which relates to the "very purpose of the communication", and also the semantic structure of the sentence – "i.e. the semantic contents of the elements and the semantic relations in which they enter" (Firbas 1972: 79). Whereas the relationship between the two sentences cited above cannot be accounted for in terms of Halliday's textual system, therefore, it is possible to account for them in terms of FSP.

It is because of the dynamic and variable nature of CD that Firbas insists on keeping distinct what Halliday wishes to conflate:

In determining the degrees of CD, three levels are consistently to be kept separate: that of semantic sentence structure, that of grammatical sentence structure, and that of FSP. (Firbas 1972: 81)

The status of FSP is seen to be somewhat ambivalent as a level of linguistic description. On the one hand, as Halliday shows, it reveals points of comparison with the textual component of a systemic grammar and as such relates to textual analysis. On the other hand, it is represented as accounting for the way the system works "in the very act of communication" and therefore outside grammar, and as such it relates to discourse analysis. This ambivalence is indicated by the fact that one of Danes' levels within syntax is that of the organization of the *utterance*. FSP straddles, as it were, system and its use and might be said to link up grammatical statement with what Hymes calls the ethnography of speaking (Hymes 1962). As such it serves as an appropriate transition from a discussion of contextualization as the relationship between sentences to a discussion of contextualization as the relationship between sentences and the communicative functions they fulfil.

4.4. Discourse analysis

Mention has already been made of Hymes' notion of an ethnography of speaking. He sees this as filling a gap between "what is usually described in grammars, and what is usually described in ethnographies" (Hymes 1962: 101). As he puts it:

The ethnography of speaking is concerned with the situations and uses, the patterns and functions, of speaking as an activity in its own right.

(Hymes 1962: 101)

Thus, where Halliday thinks of language functions as either accountable within the grammar in a systematic manner or as a simple list which would be “prolonged indefinitely”, Hymes conceives of them as open to systematic enquiry and believes that ultimately one might arrive at a “structural analysis, achieving the economies of the rules of grammar in relation to a series of analyses of texts”. (Hymes 1962: 103). Such analyses would of course be analyses of discourse in the sense in which this term has been defined in this chapter.

4.4.1. *Speech factors and functions*

Hymes’ suggestions for a framework within which such analyses might be undertaken might be regarded as an extension of Prague School thinking in that they are developed from an original insight in Jakobson (1960) who links the general functions of language with the factors in the speech event. Refining Jakobson’s categories slightly, Hymes distinguishes the following factors:

1) Sender (Addresser), 2) Receiver (Addressee), 3) Message Form, 4) Channel, 5) Code, 6) Topic, 7) Setting (Scene, Situation) (Hymes 1962: 110)

With each of these factors is associated a function as follows:

1) Expressive (Emotive), 2) Directive (Conative, Pragmatic, Persuasive, Rhetorical), 3) Poetic, 4) Contact, 5) Metalinguistic, 6) Referential, 7) Contextual (Situational) (Hymes 1962:117)

This is a generalized scheme of speech functions rather than a model to be applied to actual analysis of discourse. When one comes to consider the communicative function of a particular piece of language, the relationship between a sentential form and what it counts as in the particular context in which it occurs, a number of difficulties arise. To begin with, it is rare to find utterances which can be exclusively associated with one function. Thus although one can think of instances of a purely expressive use of language, like “ouch!” or “yippee!” and of a purely contact use like “uh-huh” and “hello, hello” as spoken over the telephone, most utterances fulfil more than one function simultaneously. Almost all utterances have some propositional content and are therefore referential to some degree, are in part redundant and therefore to some extent at least have a contact function. One might say that the communicative function of a particular utterance might be characterized in terms of which of the speech functions distinguished above predominates. The difficulty here is that one finds that a whole host of what seem intuitively to be different kinds of utterance are grouped together into one category. If, for example, one takes a sample of discourse from a scientific report one is likely to find that almost all of it fulfils a referential function. To come to this conclusion does not contribute very greatly to an understanding of how the discourse functions as communication. Similarly, much of the teacher talk in classroom interaction can be labelled “contact”, but obviously more needs

to be done to characterize such interaction as discourse (see Coulthard *et al.* 1972).

Jakobson is himself aware of the difficulty of associating particular instances of use with particular functions:

Although we distinguish six basic aspects of language, we could, however, hardly find verbal messages that would fulfil only one function. The diversity lies not in a monopoly of some one of these several functions but in a different hierarchical order of functions. The verbal structure of a message depends primarily on the predominant function. But even though a set (Einstellung) towards the referent, an orientation toward the CONTEXT – briefly the so-called REFERENTIAL, “denotative”, “cognitive” function – is the leading task of numerous messages, the accessory participation of the other functions in such messages must be taken into account by the observant linguist. (Jakobson 1960: 353)

No matter how observant the linguist is, however, it is not easy to establish how the different functions are hierarchically ordered in a particular instance of use. When considering actual discourse, the attempt to assign sentence-like stretches to sets of hierarchically ordered functions very soon becomes arbitrary and *ad hoc*. As Hymes points out, individual utterances do not so much reveal a hierarchy of functions as a subtle blending (Hymes 1962: 120).

But whether functions are related in a hierarchy or blend subtly together it is extremely difficult to establish how they combine in any particular instance of language use, or indeed which functions can be said to occur at all. In the quotation cited above Jakobson seems to be suggesting that the functions and their relationship might be discoverable from the “verbal structure of the message”. But as has already been demonstrated, the function of an utterance is not always indicated by overt linguistic means: if it were it could be incorporated into a formal statement and there would be no point in distinguishing text and discourse. As Hymes points out:

In general, a message or feature has a particular function in behavior only for specified classes of participants in the speech event. An act of speech may have directive, yet no referential value, for someone who knows nothing of the language involved. Many misunderstandings arise from situations in which the referential value of a message is understood but not the expressive or directive import, because the Receiver does not share the Sender’s conventional understandings, or code, for these. In short, speech functions must be defined in contexts of use. (Hymes 1962: 122)

Although it is important to recognize that there is no equation between linguistic form and communicative function, and that the context has a crucial determining effect on what utterances count as (see also Ervin-Tripp 1964, 1971), we must be careful not to downgrade the importance of the language itself. When considering written discourse in particular one has to recognize that very often the only evidence that is available as to what sentences count as takes a linguistic form. Features of the context which are external to the actual language used in spoken discourse are in written discourse commonly expressed within the discourse itself, and in this case it is true to say that “the verbal structure of the mes-

sage” extending over a range of sentence-like parts may determine the communicative function of a particular constituent utterance. It is not the form of a particular sentence itself which determines what function it has as an utterance but the manner in which it relates to other parts of the discourse. It seems to me that this is a crucial distinction to make, and its implications are taken up in the chapters which follow.

Meanwhile we have yet to establish a framework within which the communicative import of utterances might be described. In the quotation cited above, Hymes is thinking of the context of use as providing an indication of which speech functions are predominant in particular utterances, but he makes no suggestion as to how it might point to “the accessory participation of other functions”. Presumably the only way in which a context of use could do this would be to provide evidence as to which of the factors in the speech event were being called into play and what degree of focus or emphasis each of them was receiving. The difficulty here, however, is that in many instances all the factors appear to come into play and it is extremely difficult to know what degree of prominence to assign to which factor. In most cases, in fact, the degree of prominence of a particular factor seems less important than the manner in which different factors inter-relate, and this suggests that a way of characterizing the communicative function of an utterance is not to specify the way in which it exemplifies the general *speech functions* but to indicate the way in which the different *speech factors* inter-relate. To put the matter simply, instead of saying that the function of a particular utterance is a blend of expressive, directive and contact with the first of these predominating, one might say that it arises as a result of the addresser having a certain relationship with the addressee, or because the setting of the utterance is of a particular kind, and so on. To adopt this approach is to move from an analysis of discourse in terms of speech functions to an analysis of discourse in terms of speech acts.

4.4.2. *Speech acts and discourse rules*

It might be supposed that speech acts or illocutionary acts (Austin 1962; Searle 1969) are simply more “delicate” subclassification of the general speech function categories of Jakobson and Hymes. Thus, it might be argued, the illocutionary acts of requesting, ordering, instructing and so on are kinds of directive utterance. Even if this were so, of course, we would still be left with the task of establishing what it is that distinguishes these acts within the general directive category. But in fact the task is much more complex since there are a very large number of what we recognize intuitively as different acts which cannot be grouped according to this general classification, at least not in any very enlightening way. For example, one might say that promising is an expressive act whereas threatening is a directive one. But it seems reasonable to suggest that the relationship between a promise and a threat is similar to that between a piece of advice and a warning in the sense that the distinguishing feature in each case is that the action or event being referred to is seen as benefitting the addressee on the one hand and being contrary to his interests on the other. Yet advising would presumably have to be

classed as a directive act, so that its relationship with promise is not made clear, and its contrast with warning is neutralized. There is a sense, too, in which the acts complimenting and insulting are related in the same way as advice/warning and promise/threat, but again they would presumably both have to be included under the expressive heading.

It would seem preferable, then, to approach the characterization of speech acts by reference not to the general speech functions which appear to predominate but by reference to the constituent factors of the speech event. This indeed is the approach that has been taken by the philosophers of language with whom the notion of speech act is associated. Thus Austin points out that for the use of a sentence to count as the illocutionary act of naming a ship it is not enough that the sentence "I name this ship 'X'" should simply be uttered. It is necessary also that it should be uttered in certain circumstances, or, to use Hymes' term, in a particular setting. As Austin points out, if I happen to be strolling in a shipyard and come across a ship ready for launching and if I solemnly say "I name this ship 'Mr Stalin'" I have not thereby named the ship, even if I happen to have a bottle of champagne with me and smash it against the bows (see Austin 1960: 23). Similarly, the utterance of a sentence like "I name this child 'X'" does not of itself count as a baptism unless the speaker has a certain status: in this case it is the addresser factor which is crucial. The same applies to sentences like "I now pronounce you man and wife."

The conditions that have to be specified for the use of a sentence to count as a particular speech act have to do, then, with the factors of the speech event as distinguished by Jakobson and Hymes. Searle, for example, gives the following as a general condition on all illocutionary acts:
Normal input and output conditions obtain.

This includes the condition that both speaker and hearer "both know how to speak the language", which relates to the code factor, and the condition that "they have no physical impediments to communication", which relates to the channel factor (Searle 1969: 57). Actually the kind of impediments that Searle mentions have to do with the physical disability of the participants, like deafness, aphasia and laryngitis, but it is obviously reasonable to include external factors like noise and internal but non-pathological features like lapses of attention within this condition as well. Other conditions that Searle mentions relate to other factors. Thus, for example, one of the conditions on such acts as promising and advising is that the propositional content of the utterance should refer to some future action, to be carried out by the speaker in the case of promising and by the hearer in the case of advising. This condition, then, clearly relates to topic. Similarly, it is obvious that the following conditions have to do with the beliefs and intentions of the addresser and addressee and hence are related to these factors in the Jakobson/Hymes scheme:

H has some reason to believe A will benefit H.

It is not obvious to both S and H that H will do A in the normal course of events.

S believes that A will benefit H (Searle 1969: 67).

The kinds of conditions that Searle sets up for different speech acts have an obvious resemblance to Labov's discourse rules, as a comparison of the following will make clear. Labov's rules for interpreting any utterance as a request for action, or command, are as follows:

- If A requests B to perform an action X at a time T, A's utterance will be heard as a valid command only if the following pre-conditions hold: B believes that A believes (= it is an AB event) that
1. X should be done for a purpose Y
 2. B has the ability to do X
 3. B has the obligation to do X
 4. A has the right to tell B to do X
- (Labov 1970: 81)

Searle's set of conditions for the illocutionary act of request is as follows:

- Propositional content: Future act A of H
- Preparatory: 1. H is able to do A. S believes H is able to do A.
 2. It is not obvious to both S and H that H will do A in the normal course of events of his own accord.
- Sincerity: S wants H to do A
- Essential: Counts as an attempt to get H to do A
- Comment: *Order* and *command* have the additional preparatory rule that S must be in a position of authority over H.
- (Searle 1969: 66)

The difference between these formulations can be accounted for in terms of the difference between a sociological and a philosophical orientation to the study of language use. Thus Labov sees the requisite conditions as having to do with social constraints like rights and obligations, which are covered in Searle by the more general notion of authority. Searle, on the other hand, focuses more on the intentions of the speaker.

4.4.3. *Sentences, utterances and communicative acts*

But although there might appear to be little difference in the kind of information which is being presented in these alternative formulations, there is considerable difference in the purpose for which these formulations are being made. Searle's concern is with the philosophical question of how sentences come to count as meaningful acts: he is therefore interested in establishing conditions of a general kind which will serve to characterize these acts as acts. Labov, however, is interested in the relationship between what is said and what is done: hence, having set up his conditions he proceeds to show how they are realized in actual acts of speech. Searle does not show us how different linguistic forms can be used to perform a promise, a request, or an order; he does not show us, as Labov does, how different utterances relate to different conditions attendant on a particular speech act. Essentially what Searle is concerned with is the meaning of sentences, as he himself makes clear:

The speech act or acts performed in the utterance of a sentence are in general a function of the meaning of the sentence. The meaning of sentence does not in all cases uniquely determine what speech act is performed in a given utterance of that sentence, for a speaker may mean more than he actually says, but it is always in principle possible for him to say exactly what he means. Therefore, it is in principle possible for every speech act one performs or could perform to be uniquely determined by a sentence (or a set of sentences), given the assumptions that the speaker is speaking literally and that the context is appropriate. And for these reasons a study of the meaning of sentences is not in principle distinct from a study of speech acts. Properly construed, they are the same study. (Searle 1969: 18)

The point is, however, that although in principle it is possible for a speaker to say exactly what he means and to make the illocutionary force of his utterance explicit, in practice he usually does not do so since the context, either of the external situation of utterance or of the preceding discourse, will generally make it unnecessary for him to do so. Searle speaks of speech acts as if they were isomorphic with sentences. In actual discourse, however, speech acts are not self-contained within formal units in this way but range over a series of utterances so that the communicative import of one of them is only discoverable by relating it with others. One can think of speech acts in terms of “standard forms” or “ideal types” and these can, of course, be described in terms of sentences, but speakers of a language do not use isolated sentences and do not communicate by consistently producing standard forms of this kind.

Searle, then, is not concerned with discourse as such since his attention is restricted to the meaning of sentences. Labov, on the other hand, sets up his conditions as a discourse rule and attempts to show how utterances can be interpreted as actions by reference to them. As he puts it:

The fundamental problem of discourse analysis is to show how one utterance follows another in a rational, rule-governed manner – in other words, how we understand coherent discourse. (Labov 1970: 79)

What Labov suggests is that we understand coherent discourse by recognizing how utterances relate to the conditions attendant on a particular communicative act. Thus, taking the conditions for making a request for action (4.4.2.), the first of the following utterances makes the request by fixing on the third condition and the second of the utterances represents a refusal to accept the request by focusing on the second condition:

A: You can do better than this.

B: I'm not supposed to be doing penmanship today. (Labov 1969: 56)

The two utterances are coherent as discourse, but not cohesive as text, because both of them relate to the conditions on the communicative act of ordering.

As I have suggested elsewhere (Widdowson 1971, 1973a, Criper and Widdowson forthcoming) Labov's approach to discourse analysis has important implications for the study and teaching of language use, and it will be the principal purpose of what follows to explore these implications. In particular I shall be concerned with the way the communicative function of utterance in written discourse is fulfilled

by the inter-relationship of linguistic elements within and beyond the sentence, this inter-relationship in effect representing the conditions upon which the meaning of the language elements depends as units of use. What I shall be attempting to do is to suggest how linguistic elements are used to give pragmatic meaning to utterances. A good deal of recent work in grammatical description has been based on the belief that the meaning which sentences assume when used to perform illocutionary acts can be accounted for within grammar. In this chapter I have reviewed work which has attempted to extend the scope of grammar by studying the grammatical and lexical structure of text. Recent work has attempted to extend the scope of grammar at the semantic level by incorporating what I have been referring to as discourse features, or aspects of language use, into the deep structure of sentences. In the next chapter I review these attempts. This review will prepare the way for my own proposals as to how the description of language in use might be approached.

CHAPTER 5

EXTENDING THE SCOPE: SEMANTICS AND PRAGMATICS

5.1. The problem of explicitness and generality

The development of generative grammar from Chomsky (1957) to Chomsky (1968) and beyond has in large part been motivated by the desire to bring semantics within the scope of grammatical statement, and to create thereby “an integrated theory of linguistic descriptions” (Katz and Postal 1964). Essentially, the purpose of incorporating a semantic component into a unified description of language structure is to bring the sentence as an abstract object into closer correspondence with actual utterances. One would expect that the consequence of this would be to reduce the division between grammaticalness and acceptability and so increase the chances of empirical validation. In fact, the result has been in many ways the reverse of this. In an attempt to account for increasingly subtle nuances of syntactic and semantic meanings, the generative grammarian has not only had to develop the machinery of his model to a degree of complexity which can no longer apparently be accounted for in terms of a set of formal rules, but he has put his findings well beyond the scope of general validation. Two of the principal advantages claimed for the earlier model of generative grammar were that it was explicit and that it achieved a higher degree of generality than did phrase structure models of grammar. Thus the rules in Chomsky (1957) are explicit and account for features of English which every speaker of the language would agree need to be accounted for. In more recent generative writings, however, we find speculative statements about the linguist’s own “dialect” based on judgements which do not always match those of the reader, and which are not given any precise and formal expression in the shape of rules of any kind.

The reason for the decline in explicitness and generality is that the search for deeper meanings has taken the grammarian beyond semantics into pragmatics. Thus the idealization upon which former models of grammar were based, and which was discussed in the second chapter of this study (2.5.), has been relaxed to allow a consideration of context, with a consequence that the distinction between sentence and utterance ceases to be a clear one.

5.1.1. Contextually determined deep structure: Lakoff

As an illustration of this, we might first consider a number of remarks in Lakoff (1970). Lakoff cites the followings sentences:

- (1) *I’ll slug him, if he makes one more crack like that.*
- (2) *If he makes one more crack like that, I’ll slug him.*
- (3) *One more crack like that, and I’ll slug him.*

Lakoff observes that constructions like (3)

are derived from preposed *if* clauses, since they are paraphrases and obey the same grammatical constraints. It follows that noun phrases like “one more crack” ... are derived from full underlying clauses and that the “and” in this construction is not an underlying “and” but rather an underlying “if-

then” ... Consequently, it follows that the understood matter in such sentences is recoverable only from context; it must be present in order to form a full clause at the time of adverb-preposing, and hence must be deleted by a rule of grammar. Thus rules of deletion in grammar must be sensitive to context, that is, to what is presupposed by the speaker. (Lakoff 1970: 9-10)

There are a number of difficulties about this proposal. In the first place, it is not clear what is meant by such expressions as “noun phrases *like* ‘one more crack’” and “*such* sentences”. If Lakoff means that whenever we have a noun phrase in isolation followed by a comma, the conjunction *and* and a sentence with a verb in the future tense, then underlying this noun phrase will be an “underlying ‘if-then’”, then his observation is inaccurate. In the same paper he cites the following sentence:

- (4) *One more beer, and I'll leave.*

He then cites a number of possible paraphrases to support his contention that what he calls “the missing material” is only retrievable from the context of utterance. For example:

- (5) *If I drink one more beer, then I'll leave.*
 (6) *If you drink one more beer, then I'll leave.*
 (7) *If you pour one more beer down my back, then I'll leave.*

But apart from the paraphrases given there are a number of other possibilities which do not require an underlying “if- then” clause. For example:

- (8) *After I have drunk one more beer, then I'll leave.*

Indeed sentence (8) seems a more acceptable alternative than sentence (5). Although Lakoff claims well-formedness for the latter as a sentence in order to support his case for an underlying “if-then”, it would be a curious utterance. It is odd to predict actions which are subject to one's own volition. Thus, while (5) is strange, the following are not:

- (9) *If I drink one more beer, then I'll get thrown out.*
 (10) *If I drink one more beer, then I shall be sick.*

But now what we have to notice is that the “if-then” construction can be used to express different “meanings”. In the case of (6), the utterance is likely to be a threat or a caution, but in the case of (9) and (10) the most likely interpretation is that the utterance would count as a prediction. In the absence of a context we cannot of course be sure. But since the “if-then” construction can carry more than one interpretation, it is difficult to see how it can be represented as an “underlying ‘if-then’”. Both “and” and “if-then” can take on different values in context and it is not clear how a grammar can represent one as being “derived” from the other.

When one considers other possible utterances in which the initial noun phrases appear to function in a similar way to those in sentences (1), (2), (3) and (4), the difficulties multiply. Consider, for example:

- (11) *One more blow, and the tree fell to the ground.*

(12) *One more disaster, and the state collapsed.*

Here the verb form precludes any underlying “if-then”. What, in this case, does “underlie” these constructions? One might suggest something like the following:

(13) *They (He? She?) gave one more blow, and the tree fell to the ground.*

(14) *One more disaster happened, and the state collapsed.*

But these paraphrases do not capture the information that there is a causative relation between the event referred to in the initial noun phrase and that referred to in the following clause. One would generally understand that the blow caused the tree to fall and the disaster caused the state to collapse. This would seem to suggest that it is not so much that there is an underlying “if-then” construction in sentences like (3) and (4), but that an isolated noun phrase followed by a conjoined sentence indicates a causal relationship between what is expressed in the former and what is expressed in the latter. But, as is clear from the fact that (4) can also be glossed by (8), this is by no means invariably the case. Furthermore, such a causal relation can be expressed by structures which do not need to be supplemented by what Lakoff calls “missing material” from the context and which nevertheless do not have any overt marker of causality of an underlying “if-then” variety. For example:

(15) *Jack fell down and broke his crown.*

(16) *He invented a clockwork wife and made a fortune.*

If it is necessary to postulate an underlying structure for sentences like (3) and (4) on the grounds that the surface form does not unambiguously indicate “what is presupposed by the speaker”, then by the same token underlying structures must also be postulated for sentences like (15) and (16). The difficulty of course is that there is no end to this process and grammatical statements become increasingly less general as the possible interpretations of sentences proliferate.

We have already noticed that one result of attempting to reduce features of utterances to grammatical rules is that the grammarian is misled into stating relationships which only occur in the sentences he cites but not in others which one would normally wish to consider to be of similar type. The problem is that recent writing in generative grammar has substituted examples for specific rules, and the examples chosen are naturally those which appear to substantiate the observation being made. Thus the observations made by Lakoff derive from and are supported by his citation of sentences (1)-(3). But as we have seen it is easy to think of examples which call the truth of the observation into question. The validity of a grammatical rule depends on its generative capacity: an observation which is true for certain instances but not for others is clearly of little validity or value. This frequently leads the grammarian to make judgements about sentences so as to make them exemplify his rules without regard to their actual acceptability. As we have seen, for example, Lakoff claims well-formedness for sentence (5). One suspects that this is because it supports his thesis whereas sentence (8) does not. A similar prejudice is illustrated by the fact that Lakoff attributes ungrammaticality to sentences which do not support his thesis but which by any other criteria

would be acceptable as grammatical. The following sentences, for example, are stigmatized by an asterisk:

(17) *One more beer and I mentioned that I would leave.*

(18) *One more beer and he left.*

These sentences are of course ungrammatical if one applies Lakoff's "if-then" formula as a test of grammaticalness, but as we have seen the structure he is dealing with does not have to be related to such a formula. (17) and (18) are only ungrammatical in respect of the "if-then" rules. But if one allows that such sentences may also be glossed by sentences such as (8), then they cease to be ungrammatical.

(19) *After I had had one more beer, I mentioned that I would leave.*

(20) *After I had had one more beer, he left.*

(21) *After he had had one more beer, he left.*

What these points illustrate is the difficulty of capturing the meaning of utterances by grammatical statement, and the danger of establishing a rule on slender intuitive evidence and then using it as a test rather than developing a rule from a careful consideration of actual data. The problem about drawing on intuition is that one's intuitions are naturally primed to support one's own ideas: they are not free agents. Thus Lakoff's intuitions lead him to assign grammaticalness according to the theory which informs them. To achieve the degree of generality necessary for a grammatical statement to be valid Lakoff has to misrepresent the data which it was the purpose of the statement to account for in the first place. We shall return to this paradox presently.

Meanwhile there is another aspect of Lakoff's treatment of these matters which has to be commented upon. As has already been observed, he takes pains to select an utterance which serves to substantiate the point he is making. Thus an utterance like that represented in (3) lends support to the view that a surface "and" is derived from an underlying "if-then". But as we have seen, it is only possible to assume such a relation when the verb in the conjoined sentence has the modal "will", and not always then. So the relationship between sentences (2) and (3) is not mediated by one feature but by a *combination* of features. The danger of working from rules to isolated utterances which are meant to exemplify them rather than in the reverse direction – developing rules from a consideration of data – is that it is not always clear which features of the utterance one is considering are the relevant ones. To take one example, the following sentence is marked by Lakoff as ungrammatical:

(22) *One more beer, and I'll realize that I'll leave.*

One might agree that this would be a curious utterance to make – though on the face of it no more curious than would be an utterance of sentence (5), which Lakoff counts as grammatical. But what is the source of the oddity? If one adjusts it slightly, one can produce what appear to be perfectly acceptable utterances:

(23) *One more beer, and I'll realize that you are leaving tomorrow.*

(24) *One more beer, and I realized that I was getting drunk.*

The oddity of (22) seems to have something to do with the conjoined sentence on its own and not with the sentence as a whole of which it forms a part. In other words, the sentence:

(25) *I'll realize that I'll leave*

would hardly count as a normal utterance because to utter such a sentence would be to predict one's own prediction. Its oddity has nothing to do with its function in sentences such as (22).

5.1.2. Implicative verbs: Karttunen

The difficulty of knowing which linguistic feature carries a particular presupposition, and the consequent difficulty of assessing the validity of the evidence provided in the form of citations, comes up again and again in recent generative writing. Let us consider another example. In his discussion of so-called "implicative verbs", Karttunen (1970) presents the following sentences as evidence that it is the peculiarity of such verbs that "an asserted main sentence with one of these verbs as predicate commits the speaker to a proposition that consists of the complement as augmented by the tense and other modifiers of the main sentence." (Karttunen 1970: 329):

(26) *Yesterday, Bill happened to break the window.*

(27) *To everyone's surprise, Sheila did not bother to come.*

(28) *Yesterday, Bill broke a window.*

(29) *To everyone's surprise, Sheila did not come.*

One would agree with Karttunen's contention that the assertion of (26) and (27) commits the speaker to the truth of (28) and (29) respectively. But then we are offered examples to show that other verbs do not carry such an implication. One of these is the following:

(30) *Yesterday, Bill was apt to break a window.*

To support his case, Karttunen chooses a sentence which is of very doubtful grammaticalness. Since his purpose is to illustrate simply that *be apt to* is not an implicative verb, it is not clear why he should wish to do this. Suppose that we adjust the example he gives so as to make it unequivocally grammatical, as follows:

(31) *Bill was apt to break windows.*

It now appears that the verb *be apt to* is in fact an implicative verb, since an utterance of (31) would commit the speaker to the truth of:

(32) *Bill broke windows.*

One might argue, then, that the non-implicative nature of the verb in (30) has something to do with the use of the singular indefinite noun phrase *a window*. Alternatively, and perhaps more satisfactorily, one might take *be apt to* as a marker of aspect rather than a lexical verb.

One begins to suspect that the implication which Karttunen discusses is not a property of the verb but of certain utterances which make use of such verbs that he mentions: that it is the use of certain verbs in combination with other linguistic features which carry implications. For example, Karttunen claims that the verb *condescend* is implicative (Karttunen 1971), and indeed it does have implicative force in utterances like:

(33) *Arthur condescended to mow the lawn yesterday.*

This carries with it the implication that Arthur mowed the lawn yesterday. But the following utterance obviously carries no implication that the action referred to in the complement has been carried out:

(34) *Arthur has condescended to take Agnes to the theatre tomorrow.*

An assertion of this sentence does not commit the speaker to the proposition that Arthur has taken Agnes to the theatre.

Just as one can think of instances where a so-called implicative verb is used in an utterance which does not carry the kind of implications which Karttunen claims for it, so it is not difficult to think of utterances where the so-called non-implicative verbs are used to make the kind of statement which does carry such implications. The verb *decide*, for example, is said to be non-implicative, and sentences like the following would seem to support such a view:

(35) *Arthur decided to leave.*

But an utterance of a sentence like:

(36) *In 1942, Arthur and Agnes decided to get married.*

would certainly carry the implication that Arthur and Agnes got married. It would seem to be necessary to make a distinction between verbs which always carry such implications whatever the actual context of utterance, like *manage*, and those which may or may not, like *condescend* and *decide*. In Karttunen, as in Lakoff, one is constantly in doubt as to whether the meanings being discussed are a property of specific linguistic elements and are hence features of the code, or a property of particular utterances and hence features of a use of the code.

5.1.3. Grammaticalness and acceptability

It would appear to be the case, then, that the meanings which grammarians attach to specific linguistic elements are more likely to be a function of the combination of linguistic elements which constitutes a particular utterance. As Bolinger observes:

Sentences are hosts to many built-in distractors; it is hard to find one that highlights only the phenomenon in question. (Bolinger 1971: 524)

Bolinger's remark is made in the course of a criticism of Postal (1970) in which he questions Postal's judgement on grammaticalness in much the same way as we have questioned Lakoff and Karttunen. Bolinger points out that there are a num-

ber of sentences which Postal marks with a star which, provided with suitable contexts, become acceptable as utterances, remarking wryly:

... how easily one can err in questions of acceptability (Bolinger 1971: 532)

As in the other cases we have considered, Postal's principal error is to attribute meanings to isolated linguistic features and then to choose examples in such a way as to support his thesis. This leads him to select the following to show that sentences with the verb *remind* and an indirect object cannot have the latter questioned by *who*:

(37) *Who did Max think Harry reminded of a gorilla?*

But, as Bolinger observes, there is nothing odd about the following:

(38) *Who(m) did Harry remind of a gorilla?*

The unacceptability of (37) derives not from the fact that the indirect object of the *remind* sentence is questioned by *who* but by reason of the embedded sentence *Max thinks* which has nothing to do with the point at issue, and is, in Bolinger's term, simply a distractor. It is anyway open to question whether (37) is indeed ungrammatical. As an utterance it would be an odd one, but then so would the following, which one presumes Postal would allow grammatical status as a sentence:

(39) *I called the man who wrote the book that you told me about up.* (Chomsky 1965: 11)

Chomsky is careful to distinguish between the notions of grammaticality and acceptability:

The notion "acceptable" is not to be confused with "grammatical". Acceptability is a concept that belongs to the study of performance, whereas grammaticality belongs to the study of competence. (Chomsky 1965: 11)

But since grammarians like Lakoff and Postal attempt to account for features like presupposition and implication, which have to do with the performance of sentences, it naturally becomes impossible to keep these notions of acceptability and grammaticality distinct. Many of the instances cited by Lakoff and Postal, like (37) above, might well be regarded as unacceptable utterances, but as Chomsky points out this by no means makes them ungrammatical as sentences:

Note that it would be quite impossible to characterize the unacceptable sentences in grammatical terms. For example, we cannot formulate particular rules of the grammar in such a way as to exclude them.

(Chomsky 1965: 11-12)

5.2. The Confusion of Sentence and Utterance

It would seem, however, that recently grammarians have in fact been attempting the impossible by aiming to include within the scope of grammatical statement aspects of language use which have to do with acceptability rather than grammaticality, with performance, in Chomsky's sense, rather than with competence. The

reason why one finds oneself so frequently questioning the validity of the examples given as evidence is basically because the clear distinction which Chomsky draws is not made. One notices how easily certain grammarians slip from talking about sentences into talking about utterances, as if the two terms were synonymous. Thus Lakoff, in discussing the underlying structure of *sentences*, proposes that the formula he postulates should be extended “to include indications of the place and time of the *utterance*” (Lakoff 1970: 29, my italics); and Karttunen refers to what appear to be the same phenomena sometimes as “sentences”, sometimes as “structure”, sometimes as “assertion” and sometimes as “utterance”. One might compare the following remarks, for example:

Essentially, the question is whether there is any difference between the semantic representation of a single sentence and the set of implications derivable from it.
Karttunen 1970: 329)

There are some writers ... who explicitly identify the semantic representation of an utterance with the set of consequences which can be derived from that utterance.
Karttunen 1970: 338)

5.2.1. *Reference and inference: Bolinger*

We have seen, then, that there is considerable confusion between the meaning of linguistic elements and what their use might imply in a particular context. This confusion is commented upon by Bolinger (1971). He points out that a distinction has to be made between *reference* and *inference*, the former having to do with “features of meaning (which) are IN a linguistic form” and the latter having to do with “what features are suggested to our minds ABOUT it, by the actual context or by past associations.” (Bolinger 1971: 522). Consider the following example from Bolinger:

(40) *I'm starved.*

(41) *Serve me dinner!*

One may say that an utterance of (40), in certain circumstances, counts as an order of the kind represented by (41), that as an utterance (40) implies (41). But although there is therefore an inferential relationship between these two as *utterances*, there is no referential relationship between them as sentences at all. Leech (1969) discusses similar examples:

(42) *He jumped from the fiftieth floor.*

(43) *He jumped from a building.*

(44) *He committed suicide.*

He comments:

‘He jumped from the fiftieth floor’ may imply ‘He committed suicide’ as surely as it implies ‘He jumped from a building’, although only the latter inference could be brought within the scope of semantic rules.

(Leech 1969: 13)

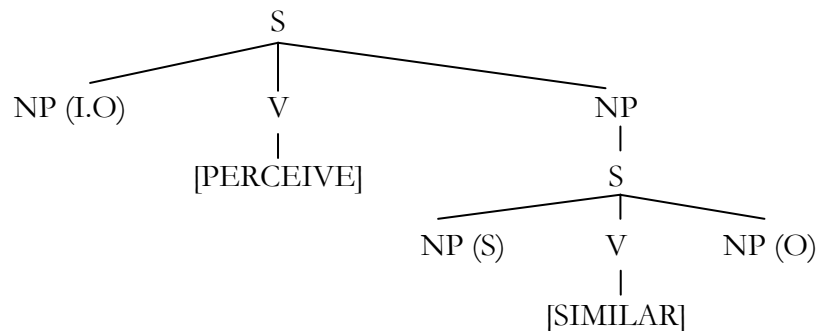
One would wish to say that the relationship between (42) and (43) is, in Bolinger's terms, a referential one, whereas that between (42) and (44) – or indeed between (43) and (44) is inferential, depending as it does on the context in which the form is used. The difficulties which we have noted in the work of people like Lakoff and Postal arise as a result of attempting to bring inference within the scope of semantic rules. Inference is, in fact, a pragmatic matter.

5.2.2. *Semantics and pragmatics: Bar-Hillel*

This is the principal point that Bar-Hillel makes in his criticism of Postal (1970) and other articles on the verb *remind* which Postal's paper stimulated in the *Linguistic Inquiry*. The authors of these papers, says Bar-Hillel:

... felt themselves obliged to force a clearly pragmatic matter into a syntactico-semantic straitjacket, whether that of some 'standard' transformational theory or of generative semantics. (Bar-Hillel 1971: 401)

Postal represents the deep structure of the verb *remind* by the following configuration:



This leads him to suggest that the following sentences are synonymous:

- (45) *Larry reminds me of Winston Churchill.*
 (46) *I perceive that Larry is similar to Winston Churchill.*

This in turn leads him to stigmatize the following as contradictory and therefore unacceptable:

- (47) *Larry reminds me of Winston Churchill although I perceive that Larry is not similar to Winston Churchill.*

But (47) is only unacceptable on the assumption that referential meaning must always match inferential meaning. One can establish that (45) and (46) are synonymous *as sentences*, so that if (47) were considered as a *sentence*, that is to say as an exemplification of the grammatical rule which Postal postulates, then there is a case for considering it unacceptable because it is ungrammatical. But as an *utterance*, (47) is not contradictory at all, because in context elements like *remind* and *be similar to* take on inferential value which may be at variance with their referential identity. Thus there is nothing very odd about the following exchange:

- (48) A: *Larry reminds me of Winston Churchill in the way he tackles a problem.*
 B: *He does not look like Winston Churchill.*
 A: *No, he is not similar to Churchill in that respect, but he reminds me of him as far as his character is concerned.*
 B: *You mean that he reminds you of Winston Churchill even though he is not similar to Winston Churchill?*
 A: *Yes, that's right.*

It may be true, of course, that an utterance of the exact form of (47) would be of fairly rare occurrence, but this has nothing to do with whether or not it is contradictory, and nothing to do with whether or not it is grammatical as a sentence (see Chomsky 1957: 15-17).

What is wrong with (47) is that it needs some ingenuity to think of a context which would call forth exactly this form of utterance. Bar-Hillel makes much the same point in relation to another of Postal's starred citations:

- (49) *Harry reminds me of himself.*

He suggests that the oddity of this arises from the fact that it is difficult to imagine a set of circumstances in which such a sentence would need to be used. Speaking generally of Postal's proposals, he states:

It is not that "remind" sentences require (for grammaticalness) non-identity of "presupposed" references of subject, object, and indirect object but rather that if the utterer of such a sentence were to believe the references of subject and object to be identical, it would be hard to envisage a situation in which he would want to utter this sentence at all. (Bar-Hillel 1971: 405)

5.2.3. *Types and tokens*

The confusion between semantics and pragmatics and utterances and sentences which has arisen in these attempts to extend the scope of grammar to deal with the communicative use of language has been the focus of discussion among philosophers of language. In Strawson (1950/1968), for example, we find arguments against Bertrand Russell which closely parallel Bar-Hillel's arguments against Postal. Strawson shows that Russell's discussion of the famous sentence "The king of France is wise" leads to a false solution because of a failure to make a distinction between:

- A1 a sentence
- A2 a use of a sentence
- A3 an utterance of a sentence

and, correspondingly, between:

- B1 an expression
- B2 a use of an expression
- B3 an utterance of an expression. (Strawson 1968: 66)

Strawson is concerned only with a certain type of sentence: that which begins with a uniquely referring expression, and of course by “expression” he means one which is used to refer uniquely as represented by a definite noun phrase. But what he has to say clearly has more general application. The distinction Strawson makes between A1/A2 and B1/B2 is essentially the distinction which Bar-Hillel draws between semantics and pragmatics, and which Bolinger draws between reference and inference. The distinction between A2/A3 and B2/B3 relates to the difference between an utterance as a communicative act and an utterance as the substantial realization of linguistic forms (see Bar-Hillel 1970; Garner 1971; Lyons 1972). It is the first of these distinctions that we are at present concerned with. Strawson remarks:

Let me use ‘type’ as an abbreviation for ‘sentence or expression’. Then I am not saying that there are sentences and expressions (types), *and* uses of them, *and* utterances of them, as there are ships *and* shoes *and* sealing-wax. I am saying that we cannot say *the same things* about types, uses of types, and utterances of types. And the fact is that we do talk about types; and that confusion is apt to result from the failure to notice the differences between what we can say about these and what we can say only about the *uses* of types. We are apt to fancy we are talking about sentences and expressions when we are talking about the uses of sentences and expressions.

(Strawson 1968: 68)

The difficulty about recent writing in generative grammar, it is suggested, is that they tend precisely to say the same things about types, in Strawson’s sense, and their uses. Paradoxically grammarians have been stimulated to extend the scope of grammar and in consequence to efface this distinction by philosophers of language who are at pains to make the distinction plain. Thus the work of Austin (Austin 1962, 1963) and Searle (1969) has led linguists to incorporate illocutionary elements into the underlying structure of sentences in spite of the fact that illocutionary acts are clearly to be characterized in terms of the *uses* of sentences. (See, for example, Boyd and Thorne 1969; Ross 1970; Lakoff 1971; McCawley 1968, etc.). The following quotation from McCawley will serve as an illustration of the kind of confusion which we have been discussing. He defines the performative verb as:

... a verb that specifies the illocutionary force of the *sentence* it heads, that is, a verb that specifies the relationship the *utterance* mediates between speaker and person spoken to.

(McCawley 1968: 155; my italics)

Similarly, notions of presupposition, which philosophers have associated with illocutionary acts, have been described as features of sentences. In Fillmore (1969), for example, we find presuppositions defined as:

... those conditions which must be satisfied before the sentence can be used (to make an assertion, ask a question, give a command, express a feeling etc.)

(Fillmore 1969)

Garner, in discussing Fillmore’s treatment of presupposition, expresses the philosopher’s doubt of its validity:

On the whole it is probably better not to speak of the presuppositions of *sentences*. The same sentence (that is, two tokens of the same sentence object type) can be used, on different occasions to perform different kinds of illocutionary acts. For example, the sentence *I will go to the orgy* may be used in differing circumstances to make a statement, a prediction, or a promise, to give a warning or to express a resolution. Further, even a single sentence act token may count as the performance of several different illocutionary acts – for an example see Searle (1969: 70-71). In the light of these facts it is difficult to see what might be gained by treating happiness conditions as presuppositions of *sentence* act or object types. (Garner 1971: 38)

What people like Fillmore and his fellow generative semanticists are attempting to do is in effect to bring all aspects of language and its use within one unitary model of description. This necessarily involves effacing the sentence/utterance distinction and indeed removing the very methodological foundations of linguistics which de Saussure took such pains to establish (see Chapter 2.2). Fillmore expresses the belief that:

... eventually linguists will be able to construct a system of rules by means of which, given the complete grammatical description of any sentence, one can “compute” the full set of presuppositions which must be satisfied for any in-good-faith utterances of that sentence. (Fillmore 1971: 277)

But he has to acknowledge that such a system of rules is likely to be “extremely complex” involving “just about everything imaginable”. One wonders whether such a complex and comprehensive description would have very much value, even in the event of its being capable of achievement. Certainly recent work, as we have seen (in 5.1 above) has resulted in speculative statement rather than specific rules and does not inspire one with much confidence. Chomsky himself, while recognizing the importance of such matters as presupposition and focus (which we shall have occasion to refer to later), states that:

... the attempt to express the latter concepts (i.e. presupposition and focus) in terms of deep structure seems to me to have led to considerable artificiality in the construction of grammars, in recent work. (Chomsky 1968: 31)

5.3. The grammatical account of pragmatic potential

So far we have been considering the confusion and complexities which arise from attempts to extend the scope of grammatical statement by relaxing the traditional idealization of *langue/parole* and competence/performance and thus effacing the distinction between sentence and utterance. It would appear that the grammarian’s consideration of pragmatic features like presupposition and illocutionary force yields little definite help for the characterization of discourse. His statements are, as yet at least, too speculative and his evidence too inconclusive. But it is not only that the incursion into pragmatics is likely to complicate grammar beyond what Lyons calls the point of diminishing returns, but it actually compromises the effectiveness of the grammar in dealing with fundamental grammatical relations.

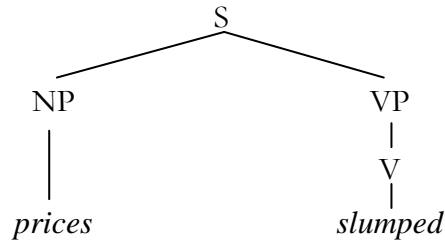
Reference has already been made to the use to which a number of grammarians have put the notion of illocutionary force, first proposed by Austin (1962,

1963) and developed by Searle (1969). In essence, their proposal is that every sentence should be provided with a superordinate performative node in the deep structure. Thus Ross claims that for a sentence like:

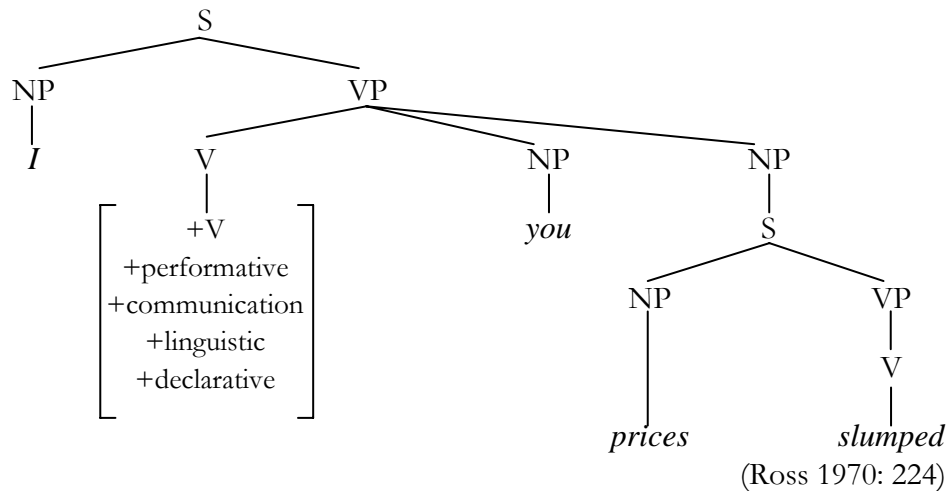
(50) *Prices slumped*

the deep structure will not be (51) but (52)

(51)



(52)



Thus the deep structure of (50) would take the form of something like:

(53) *I inform you prices slumped.*

In a similar, if less precise, way, Boyd and Thorne (1969) stipulate that the deep structure of (54) is something like (55):

(54) *Come here.*

(55) *I order you you come here.*

5.3.1. Inadequacies

There are two difficulties about these proposals. The first relates to our previous discussion about the capacity of a grammar to account for features of language use. One can say that an utterance of sentence (50) is likely to constitute a simple assertion and that therefore it is likely to carry the force which is given explicit

expression in a sentence such as (53). But of course a particular utterance of (50) need not count as an act of informing. One may assert something which the hearer already knows perfectly well in the course of recapitulating, or to confirm something which the hearer has already said. Recapitulating and confirming are illocutionary acts which are distinct from informing. Ross to some extent avoids this difficulty by commenting in a footnote:

The bundle of syntactic features dominated by the highest V (i.e. of (52) above, *my comment*) would appear in the lexical representation of such actually existing verbs as *assert, declare, say, state, tell*, etc.; but it need not be assumed that any of these occurs in the deep structure. (Ross 1970: 262)

But if the deep structure is to specify the illocutionary element with any precision it will not do simply to provide common features.

Declaring and informing are different illocutionary acts, just as are, say, ordering and asking a question, and if there is an argument for distinguishing the latter pair in deep structure, then it should presumably apply equally to the former pair. It might be objected that Ross is only concerned with making distinctions which are required by syntactic evidence, and that declaring and informing sentences behave alike syntactically, whereas ordering and asking questions are performed by quite distinct syntactic forms. Against this it must be pointed out that the evidence that Ross gives for postulating an underlying performative for declarative sentences is open to precisely the same objections as were made in connection with Postal and Karttunen (see also Matthews 1972). Ross's use of such devices as ? and ?? in addition to the traditional asterisk to indicate degrees of acceptability only emphasises the danger of citing imaginary utterances to support syntactic statements. Furthermore, there is syntactic evidence of a very simple kind which would support a distinction between declaring and informing sentences in that *declare* is an intransitive verb whereas *inform* is not.

In fact, as remarks elsewhere in his paper make clear, Ross thinks of all of the acts to which these different verbs refer as essentially one act: that of assertion. Referring to sentence (50) and the following:

(56) *I promise you that I won't squeal.*

he remarks:

... the fact that the uttering of [(50)] constitutes an assertion, just as the uttering of [(56)] constitutes a promise, suggests that their deep structures should not differ markedly, so that there will be a uniform deep structural configuration on which to base the semantic notion *speech act* ... it is likely that all types of sentences have exactly one performative as their highest clause in deep structure, so the deep structure of declaratives should not differ from this general scheme. (Ross 1970: 248)

It is clear from this that Ross believes that his proposal does incorporate the illocutionary element into the deep structure. In fact, as we have seen, it allows him to make a somewhat crude division between acts like promising and acts like asserting but only at the expense of an oversimplification which puts the validity of the operation into question.

The first difficulty with these proposals then is that they claim to be accounting for features of language use which they do not in fact account for. So far this difficulty has only been illustrated with reference to Ross, but it is easy to see that what has been said applies equally to Boyd and Thorne (1969). Briefly, if one postulates a deep structure for (54) of the form roughly represented by (55), one is committed to the assumption that sentences in the imperative always have the illocutionary force of an order. In fact, of course, imperative sentences can be used to perform a whole range of acts, and even if one considers (54) not as a sentence object token but as an utterance object type (to use distinctions made in Garner 1971 – see 5.2.3. above) there are a number of utterance act types which it could be used to perform. It could be a command, a request, an appeal, a piece of advice, and so on.

5.3.2. *Contradiction*

The second difficulty has to do not with the inadequacy of the grammar to account for pragmatic information but with the basic incapacity of the grammar to deal with such information without compromising its capacity to deal with matters of what one might wish to regard as a more fundamentally syntactic kind. The point is that not only is the attempt to conflate sentence and utterance, system and use, unhelpful and unconvincing, it is in fact self-contradictory.

If one states that (50) and (54) are surface forms derived from deep forms represented by (53) and (55) respectively, and if one claims (as one presumably has to) that the transformational deletions which effect this derivation do not change meaning in any way, then one is obliged to assume that (53) *as a surface form* has the same illocutionary potential as (50) and that (54) as a surface form has the same illocutionary potential as (55). But since the conditions under which (50) would be uttered are not the same as those under which (53) would be uttered (and the same applies to the other pair), then it is clear that they do not have the same illocutionary potential. As Austin has pointed out, an act of promising, for example, can be made explicit by the use of the performative verb *promise*, but the very act of making an act explicit alters the act itself: an implicit promise is not the same illocutionary act as an explicit promise. But if this difference is to be captured within a grammar which claims to account for illocutionary features of sentences, then it must be specified in the deep structure. If it is so specified, the deep structure for (50) will turn out to be different from the deep structure for (53).

Consider the circumstances in which one would utter a sentence containing an explicit performative verb. In most cases such a verb is used to draw attention to the act which is being performed, often to give it the status of a formal pronouncement. Thus explicit performatives occur commonly in legal documents of various kinds. A British passport, for example, contains the following compound illocution:

- (57) *Her Britannic Majesty's Principal Secretary of State for Foreign Affairs Requests and requires in the Name of Her Majesty all those whom it may*

concern to allow the bearer to pass freely without let or hindrance and to afford the bearer such assistance and protection as may be necessary.

But it is difficult to accept that this represents the same illocutionary act as would the utterance of a sentence like, for example:

(58) *Pass the salt.*

And if it were the case that the use of an explicit performative verb had no effect on the illocutionary force of an utterance, it is difficult to see why the utterance of a sentence such as the following instead of (58) would be likely to give rise to amusement at the dinner table:

(59) *I request you to pass the salt.*

Similarly the explicit performative *say* in any context except that of the pulpit or the hustings would almost always be used only to achieve a jocular effect:

(60) *I say to you the milk is boiling over.*

Since the use of the performative verb is generally restricted to those occasions when the speaker wishes to give formal notice of the illocutionary act he is performing, there is in fact a case for saying that, with some performatives at least, their use represents not only the act itself but a kind of metalinguistic (or perhaps metalocutionary) statement about it as well. Certainly of the following:

(61) *Break the door down.*

(62) *I order you to break the door down.*

(63) *Break the door down, and that's an order.*

(62) and (63) seem to have an illocutionary resemblance which (61) does not share. These sentences would very likely be uttered in the same circumstances: when the addressee had shown reluctance to act on an order represented by such a form as (61). One is tempted to suggest that if the deep structure of (61) is:

(64) *I order you you break down the door.*

then the deep structure of (62) and (63) might be represented as something like:

(65) *I say you I order you you break down the door.*

It would be better, however, not to attempt to account for such differences in deep structure at all. To do so is to create a contradiction that structures which are equivalent in the grammar so long as one of them remains in the deep become contrastive as soon as they both appear on the surface, hence, in effect, defeating the object of setting up the equivalence in the first place. And this contradiction has more serious consequences in that it can undermine the adequacy of the grammar to deal with certain basic syntactic facts.

Let us illustrate this by considering the passive. The passive has always been the favoured example for demonstrating the advantage of the transformational model of syntax over other models, and one must suppose that the relationship between active and passive forms is a basic syntactic fact which any grammar would be required to account for. But if the grammar is also to account for the

different illocutionary effects achieved by the use of one form rather than the other, then it is difficult to see how it *can* account for the syntactic relationship between them. Let us consider the following sentences:

- (66) *The dog bit the man.*
 (67) *The man was bitten by the dog.*

Now it is obvious that an utterance of (66) would be likely to constitute a different kind of statement from an utterance of (67). One might express this simply by saying that one would be a statement about the dog and the other a statement about the man, and that the two statements differ with respect to topic and comment. Chomsky makes much the same observation in connection with the following:

- (68) *The sonata is easy to play on this violin.*
 (69) *This violin is easy to play the sonata on.*

His comments would apply equally well to the use of sentences such as (66) and (67):

These sentences share a single system of grammatical relations and, in some reasonable sense of paraphrase, may be regarded as paraphrases; they have the same truth conditions, for example. However, they seem different in meaning in that one makes one assertion about the sonata, and the other about the violin.
 (Chomsky 1968: 49-50)

But it is not only that the statements would refer to different topics. The nature of the occurrence described is represented differently in each case. In (66) the focus is on the action and in (67) it is on its effect. Thus it is not possible to use sentence (67) in response to a question in the form of the following:

- (70) *What did the dog do?*

A question which focuses on the action cannot be appropriately answered by a statement which focuses on the effect of the action.

Seuren makes the interesting suggestion that “Most verbs have a common semantic factor ‘do’” (Seuren 1969: 80) and gives reasons for grouping verbs into two categories: those which contain the factor ‘do’ and those which contain the factor ‘be’, the latter incorporating all copula verbs. We may say that one difference between active and passive sentences is that the former makes use of a ‘do’ verb and the latter of a ‘be’ verb. One could argue that the verb in (66) is different from the verb in (67), and suggest that the latter might be represented in the deep structure by something like */bite + effect/* in much the same way as the verb *kill* has been represented in recent writings as */die + caus/*, *buy* as */sell + caus/* and so on. (See Lyons 1968; Lakoff 1970a). A proposal of this kind would give grammatical recognition to the different “pragmatic potential” of active and passive sentences, but would in consequence have to represent them as having different deep structures. Before developing this point further, let us consider other cases where the active and the passive have different “meanings” in use.

The use of the active, for example, alters the presuppositions implied in the statement. Chomsky (1968) points out that in the following sentences:

(71) *Einstein has visited Princeton.*

(72) *Princeton has been visited by Einstein.*

the first presupposes that Einstein is still alive, whereas the second does not. If one wishes to account for presupposition in deep structure, therefore, (71) must be given a different representation from (72). As we have seen, Chomsky speaks of sentences which are paraphrases “in some reasonable sense”, like (68) and (69) as having “the same truth conditions”. But in the case of (71) and (72) the truth conditions would appear to be different. They are perhaps more obviously different in sentences like the following:

(73) *Mercury thermometers measure temperatures.*

(74) *Temperatures are measured by mercury thermometers.*

The second of these would represent a false statement since mercury thermometers can only measure a certain range of temperatures.

The problem with (73) and (74) can be traced back to the use of the adjective which restricts the scope of the referring expression and so makes (73) an acceptable generalization and (74) an unacceptable one. Hence there is nothing wrong with the following:

(75) *Thermometers measure temperatures.*

(76) *Temperatures are measured by thermometers.*

These examples are, of course, indicative of a general problem with sentences which contain a noun phrase which has a qualification of some kind and with the interpretation of quantifiers. Chomsky cites the following sentences to show the lack of semantic equivalence between active and passive:

(77) *Everyone in the room knows at least two languages.*

(78) *Two languages are known by everyone in this room.* (Chomsky 1957: 100-1)

Chomsky makes the point that one can describe circumstances in which the utterance of the active sentence would be true but the utterance of the passive sentence would be false. He concludes:

This indicates that not even the weakest semantic relation (factual equivalence) holds in general between active and passive. (Chomsky 1957: 101)

Although this conclusion has been questioned (see Katz and Postal 1964: 72-3), Seuren (1969) provides a good deal of additional evidence for supposing that active and passive sentences are to be distinguished in the base, and he actually produces deep structures for (77) and (78) in terms of a different ordering of operators so that (77) would have an underlying structure of the form:

(79) Neg E (individual in the room) E (2 languages): the individuals Pres know the languages

which Seuren glosses as “It is not true that there is an individual in the room and that there are two languages such that the individual knows the languages”

(Seuren 1969: 113). Sentence (78), on the other hand, would have an underlying structure of the following form:

- (80) E (2 languages) Neg E (individual in the room): the individual Pres know
the languages by Passive

This would presumably be glossed as something like: “There are two languages and it is not true that there is an individual such that the individual knows the languages.” (see also Thorne 1972)

The position of Katz and Postal (1964), on the other hand, is that the two sentences in question are both ambiguous as between the two interpretations. As they point out, their theory that the deep structure of sentences serves as sole input to the semantic component, and that transformations therefore have no effect on meaning, commits them to two assumptions:

First, if actives and their corresponding passives are the same in meaning, the differences between their underlying P-markers are semantically insignificant; and second, if actives and their corresponding passives are different in meaning, the differences between their underlying P-markers are semantically significant in the relevant respects. (Katz and Postal 1964: 73)

Their view is that there is no difference of meaning, and this enables them to derive active and passive sentences from the same underlying structure, thus preserving the essential syntactic relationship between them. This view is, of course, essentially that of the “standard” generative syntax model of description which is given its fullest expression in Chomsky (1965). The difficulty with this model is that it not only assumes synonymy between active and passive sentences but between a whole set of sentences whose synonymy is less readily acceptable.

5.4. The problem of synonymy

One might say that Seuren’s distinctions cited in the preceding section are made with reference to a relatively small number of exceptions of a rather trivial kind, and that in spite of the fact that one can point to certain differences in emphasis and presupposition in the use of active and passive forms they nevertheless have an intuitively recognizable sameness of meaning. But it is less easy to maintain this view about other sentences which the “standard” theory relates to the same underlying structure.

Kac (1969) points out, for example, that not only are the following represented as derived from the same deep structure:

- (81) *John ate the watermelon.*
(82) *The watermelon was eaten by John.*

but so are the following:

- (83) *It was John that ate the watermelon.*
(84) *It was the watermelon that was eaten by John.*
(85) *It was the watermelon that John ate.*
(86) *It was John that the watermelon was eaten by.*

But even this does not exhaust the possibilities. The following, too, must be represented as deriving from the same underlying source:

- (87) *What John ate was the watermelon.*
 (88) *What was eaten by John was the watermelon.*

But although informants might be prepared to concede a basic synonymy in the case of the active/passive pair, it is unlikely that they would do so for all of these sentences. Certainly they have different potential as statements: they imply different presuppositions and have, in Halliday's sense, different textual function (see Halliday 1967-1968; Halliday 1970a, etc.). It might of course be argued that these differences are "less important" than the basic syntactic properties which all the sentences have in common. But how is such relative importance to be established? Halliday's view is that

It is not necessary to argue that one function is more abstract, or "deeper" than another; all are semantically relevant. (Halliday 1970a: 165)

And again:

... it seems doubtful whether one could insist, for example, that //it was yesterday John painted the shed// and //the one who painted the shed yesterday// was John//, taken in context, have the same meaning, while at the same time asserting that *John painted the shed yesterday* and *John was painting the shed yesterday*, or the modally agnate pair *John painted the shed yesterday* and *did John paint the shed yesterday?* have not.
 (Halliday 1968: 179-80)

Halliday's view is given support by the notion of context-dependent grammaticalness which was referred to earlier (5.1.1.) in connection with Lakoff (1970). As Lakoff puts it in another paper:

... grammaticality must be defined relative to assumptions about situational contexts and to thought processes. (Lakoff 1971: 69)

The consequence of this view of grammaticalness is that it is impossible to say whether the following apparently perfectly grammatical sentences are in fact grammatical or not:

- (89) *The boy is over there.*
 (90) *A boy is over there.* (Examples from R. Lakoff 1969: 124)

The reason for this curious paradox is that (90) for example becomes ungrammatical in a context such as:

- (91) A: *Where is the boy?*
 B: *A boy is over there.*

Similarly, (92) is ungrammatical in the context of (93):

- (92) *She has gone home.*
 (93) A: *Where is Arthur?*
 B: *She has gone home.*

By the same token, then, one can claim grammatical differences between the different sentences (81)-(88) on the grounds that their correct use depends on the context of occurrence. As Halliday points out (Halliday 1968) the following sentences are not related:

(94) *No-one else had known where the entrance to the cave was situated.*

(95) *What John discovered was the cave.*

Following the Lakoffs, we might say that (95) is ungrammatical in this context, since it no more relates to (94) than (91B) relates to (91A), or (93B) to (93A). The choice of what in the “standard” generative syntax model would be an alternative/surface form, however, connects the two sentences together to form a text:

(96) *No-one else had known where the entrance to the cave was situated. The one who discovered the cave was John.*

or:

(97) *No-one else had known where the entrance to the cave was situated. It was John who discovered the cave.*

5.4.1. The conflation and differentiation of meanings

So far we have considered cases where the postulation of a common deep structure neutralizes differences in meaning seen in terms of the “pragmatic potential” of sentences. From this point of view, the “standard” generative model is seen as too powerful in that it relates too many surface forms to the same deep structure. It has also been criticized from the opposite point of view and has been represented as not powerful enough in that it provides different deep structures for surface forms which can be shown to derive from a common deep structure. This criticism is of interest to us because the development of deep structure analysis beyond that of Chomsky (1965) tends to make the grammar even less capable of accounting for the kind of discourse features we have been considering, and so brings the contradiction which was referred to earlier into even sharper relief.

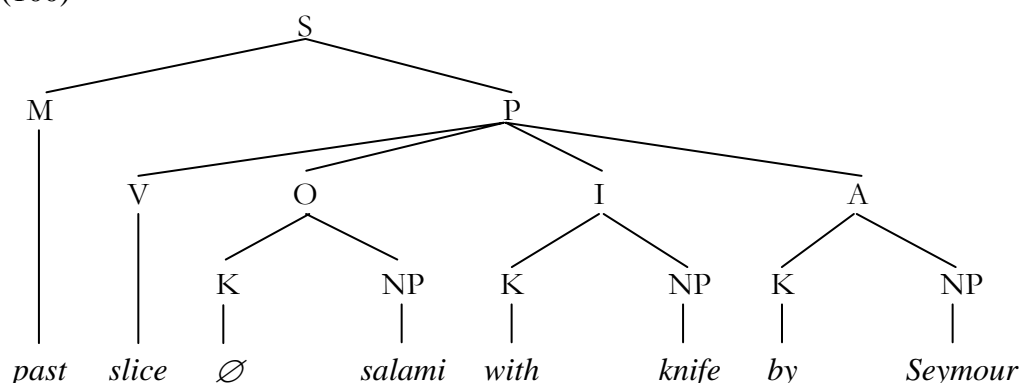
We may begin once again with Lakoff. In Lakoff (1968) there is a suggestion that the notion of deep structure in Chomsky (1965) is inadequate because it does not account for the fact that sentences like the following have the same underlying grammatical relations and are subject to the same selectional restrictions:

(98) *Seymour sliced the salami with a knife.*

(99) *Seymour used a knife to slice the salami.*

Lakoff proposes that there should be one deep structure for these two sentences and not, as would be the case with Chomsky (1965), a different deep structure for each of them. In Fillmore (1968) we find this proposal formulated in terms of case grammar. Thus underlying both of the sentences given above would be a deep structure of roughly the following form:

(100)



By applying case criteria it is possible to relate a number of apparently quite different structures to common semantic representations in the deep structure but in so doing one inevitably ignores whatever differential pragmatic potential such structures might have. Fillmore himself recognizes this. In his system, the placing of a noun phrase in the subject or object position in the surface structure is brought about by transformational rules, notions like subject and object being, for him, not a part of the underlying representation of sentences. He acknowledges that there is a possible difficulty in this procedure:

There are semantic difficulties in treating subject and object transformationally, in the sense that different choices are often accompanied by semantic differences of one sort or another. These differences are more in the order of ‘focusing’ – to be as vague as possible – than anything else, and do not seem to require positing ‘subjects’ and ‘objects’ in deep structure.

(Fillmore 1968: 48 footnote)

While acknowledging the possibility of difference in meaning, Fillmore clearly does not agree with Halliday that this is comparable in importance to the meaning relations between noun phrases which are captured by a configuration of cases in the propositional part of the deep structure. These differences are simply a matter of focusing, to account for which he is prepared “to tolerate the reintroduction into grammatical theory of transformations which have semantic import (of this highly restricted kind)” (Fillmore 1968: 48-49 footnote). Just how far it is possible to restrict the semantic effect of transformational operations is a matter of how far the grammarian wishes to incorporate presupposition and other features of pragmatic potential into his grammar. What Fillmore considers to be of peripheral concern becomes for Halliday one of the components of a grammatical description having an equal status with the ideational or experiential component, which corresponds with Fillmore’s base proposition, and the modal component, which Fillmore includes in the base as “modality” but does not develop.

What both Halliday and Fillmore accept is that whatever meaning attaches to the surface forms of sentences other than that which is generated in the base (in Fillmore) or in the experiential component (in Halliday) it is in some way different from that which is experiential or propositional, and has to be accounted for in a

different part of the grammar, either in the textual component (in Halliday) or in the transformational component (in Fillmore).

5.4.2. Semantic and pragmatic synonymy

The contradiction that the more pragmatic information you include in the base the less your grammar can actually account for pragmatic meaning is thus avoided by Fillmore by the simple expedient of reducing the comprehensiveness of deep structure. The contradiction appears to return, however, in his later writing, where the implied distinction between kinds of meaning disappears. Thus in Fillmore (1971) we are told that linguists have been asking the wrong question in semantics. Instead of asking:

What do I need to know in order to use this form appropriately and to understand other people when they use it?

they have been asking the question:

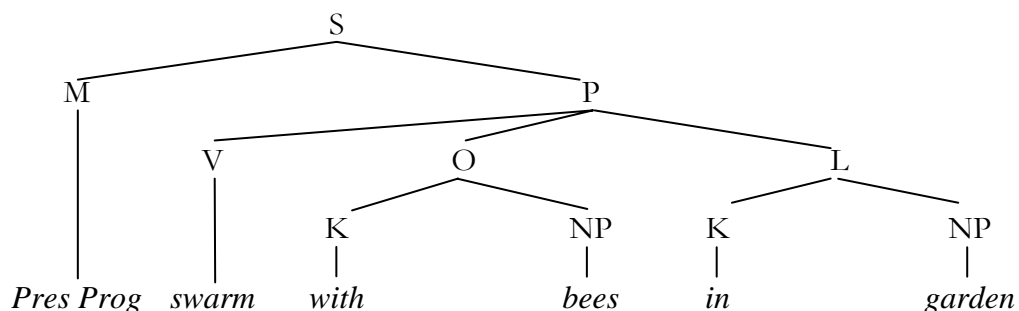
What is the meaning of this form? (Fillmore 1971: 274)

And Fillmore proceeds to turn his attention to the neglected question and in effect to concentrate on the kind of “focusing” which he previously represented as being of peripheral concern. What one would like to know is how the kind of information which the first question is directed towards can be incorporated into a grammar without interfering with the kind of “cognitive” information represented by a deep case analysis. To take just one example:

(101) *Bees are swarming in the garden.*

(102) *The garden is swarming with bees.*

These sentences would derive from the same proposition in the base of a case grammar, both being analysed as:



Such a configuration might be said to represent the cognitive or ideational meaning of both (101) and (102), but if it is also to show the kind of meaning which has to do with “the conditions under which a speaker of a language implicitly knows it to be appropriate to use given linguistic forms”, (Fillmore 1971: 275) then we shall need an underlying structure for each sentence and the information cannot be contained within the same configuration.

This, then, is the contradiction. It occurs again in relation to the suggestions which were referred to earlier in this chapter (5.3.2.) that converse terms like

buy/sell, die/kill might be accounted for in terms of causation, so that the following would have the same semantic representation in the deep:

(103) *John killed Bill.*

(104) *John caused Bill to die.*

as would the pair:

(105) *John sold the car to Bill.*

(106) *Bill bought the car from John.*

But although such an analysis establishes an intuitively satisfying cognitive relationship between these pairs of sentences, this is not to say that they have the same meaning at a more pragmatic level of analysis. As is pointed out in Bar-Hillel (1971), if they did then there would be no way of explaining why

(107) *John caused Bill to die on Sunday by stabbing him on Saturday.*

makes good sense, whereas

(108) *John killed Bill on Sunday by stabbing him on Saturday.*

makes no sense at all. Examples like this do not invalidate proposals to provide the same semantic representation for pairs such as (103)/(104) and (105)/(106), any more than the different “focusing” of (98)/(99) and (101)/(102) invalidate case grammar. What they do seem to invalidate is the attempt to crowd all information relevant to the interpretation of utterances into the underlying semantic representation of sentences.

CHAPTER 6

LINGUISTIC SIGNIFICATION AND RHETORICAL VALUE

6.1. Meaning in *langue* and *parole*

What the previous chapter has sought to show is that the attempt to incorporate features of discourse, in the sense defined in Chapter 4, into the deep structure of a grammar leads to a good deal of confusion which compromises the grammar's capacity to account for basic syntactic facts. The relaxing of the idealization represented by the *langue/parole* and competence/performance distinctions (see 2.5) brings in train a blurring of the distinction between sentence and utterance and between semantic and pragmatic meaning so that it becomes extremely difficult to assess the validity of the evidence presented in support of a particular linguistic analysis. And in the general absence of explicit sets of rules in recent linguistic writing, it becomes crucial that such evidence should be convincing.

As we have seen (5.2.3), Chomsky himself does not believe that features like focus and presupposition can be accounted for in deep structure "without great artificiality". He comments:

...it seems that such matters as focus and presupposition, topic and comment, reference, scope of logical elements and perhaps other phenomena are determined in part at least by properties of structures of K other than deep structures, in particular, by properties of surface structure.

(Chomsky 1968: 57)

What Chomsky is suggesting is consistent with Halliday's proposal to deal with different aspects of "meaning" in different components of the total description. Interestingly enough, Chomsky's objection to including everything necessary for the interpretation of utterances in the deep structure of sentences parallels Lyons' criticism of Firth's theory of meaning (Lyons 1966). While granting the importance of "situational correlates", Lyons points out that they cannot account for all meaning, and that it is possible to establish meaning in terms of sense-relations independently of Firth's context of situation. The complexities in Firth's writings, which Lyons refers to (as have many others) arise from his attempt to construct a comprehensive model of description to account for data directly without filtering it through an idealization process. His rejection of the *langue/parole* distinction (see, for example Firth 1957, Paper 14) leads to the same kind of confusion that we have already noticed in connection with recent work in generative grammar which also implies a rejection of such a distinction. We have already referred to Fillmore's belief (5.4.2) that linguists have been asking the wrong kind of question because they have asked about the meaning of linguistic forms rather than about the conditions under which certain linguistic forms would be used. But it is precisely the second kind of question that Firth asks. He defines semantics, for example, as having to do with "the function of a complete locution in the context of situation, or typical context of situation." (Firth 1957: 33). This is essentially what Fillmore's new approach to semantic description as represented in Fillmore (1971) amounts to. We shall return later (in Chapter 9) to the points of similarity between

Firth's context of situation and the set of conditions which define the illocutionary force of utterances. For the moment what has to be noticed is that the confusions arising from recent work in generative grammar and those arising from the work of Firth can be traced back to the same source.

It seems evident that a satisfactory approach to discourse analysis will have to be based on a restoration of the distinctions which are glossed over by Firth and by the linguists whose work was reviewed in the previous chapter. From the applied linguistic point of view we need an approach which will cut through these complexities and yield results which can be of pedagogic use. As a first step towards such an approach, a clear distinction must first be made between linguistic *signification* and rhetorical *value*.

6.2. Signification and value

By signification is meant the semantic specification of linguistic elements in the language code and by value the pragmatic implications the use of such elements have in context. When one speaks of the meaning of a sentence, therefore, one refers to its signification. Sentences have no value. When one speaks of the meaning of an utterance, one refers to its rhetorical value. Utterances have no signification. The difficulties which were discussed in the previous chapter arise when deep structure is required to account for both at the same time.

Thus, for example, Fillmore's sentences (99) and (100) (repeated here as (1) and (2)):

- (1) *Bees are swarming in the garden.*
- (2) *The garden is swarming with bees.*

can be said to have the same signification as sentences but differ in value as utterances, this difference having to do with the "focusing" effect which Fillmore mentions (see 5.4.1). Again, in the grammatical model proposed by Chomsky (1965), sentences (81) to (87) in the previous chapter (5.3.2), and perhaps others, have the same signification but since what I have called their pragmatic potential is different they have different value as utterances.

The distinction being made here explains why it is that:

- (3) *Larry reminds me of Winston Churchill although I perceive that Larry is not similar to Winston Churchill.*

is not contradictory as an utterance, in spite of the fact that the following are synonymous as sentences:

- (4) *Larry reminds me of Winston Churchill.*
- (5) *I perceive that Larry is similar to Winston Churchill (see 5.4.2).*

The value which (4) and (5) take on as parts of the utterance (3) has the effect of neutralizing their identity of signification. Similarly, one can represent the signification of *kill* as *die* + caus and of *sell* as *buy* + caus (see 5.3.2). But this does not of course prevent the following from having a different value as utterances:

- (6) *John killed Bill.*
- (7) *John caused Bill to die.*

This becomes clear when (6) and (7) as synonymous sentences are incorporated into an utterance which bestows values upon them which counteracts their synonymy, as with Bar-Hillel's example:

- (8) *John caused Bill to die on Sunday by stabbing him on Saturday.*

Confusion arises when it is not clear whether an example is being presented as a sentence or as an utterance and whether the reader is being asked to assess its signification or its value. We touch here, of course, on the old problem of describing language by using language. Since one linguistic element can only be described in terms of other linguistic elements, the latter are also potentially elements of utterances. Lyons makes the point in relation to componential analysis that it tends to neglect the difference between lexical items and semantic components. He comments:

For example, it is often suggested that *brother* and *sister* can be replaced by the 'synonyms' *male sibling* and *female sibling*. But this is true only in the context of anthropological or quasi-anthropological discussion.

(Lyons 1968: 479)

In our terms, *male sibling* as semantic components represents the signification of *brother*, but it does not have the same value as a lexical item. The difficulty is that *male sibling* is also a lexical item as well as being a set of semantic components.

The same difficulty arises with recent attempts to formulate the deep structure of sentences in logical terms. Thus in Bach (1968) we find a proposal to derive nouns from underlying relative clauses so that underlying the sentence:

- (9) *The professors signed a petition.*

is a deep structure with two embeddings of the form:

- (10) *The ones who were professors signed something which was a petition.*
(Bach 1968: 97)

But although there might be sound syntactic reasons for establishing such a relationship between (9) and (10) as sentences, one must be careful not to equate them as utterances. Deep structures are presented in the form of sentences which could themselves be used to make utterances since this is the only way in which common signification can be presented. It is important to realize, however, that they are not being represented as potential utterances but as abstract formulae comparable to the semantic components which Lyons refers to.

It may seem that all this is so obvious as to hardly need pointing out, but it seems to me that the uncertainty as to the status of linguistic representations has created a good deal of misunderstanding. Recent discussion as to whether *kill* 'means' *cause to die* is evidence of this (Fodor 1970). So are the remarks made by McCawley (1968) in connection with the outline of a semantic theory in Katz and Fodor (1963/1964):

... there are many situations in which a sentence which Katz and Fodor's theory will disambiguate in favor of a certain reading will be understood as meaning something which their disambiguation procedure will reject as a

possible reading. For example, Katz and Fodor's theory would mark *bachelor* in

(11) *My aunt is a bachelor.*

as unambiguously meaning "holder of the bachelor's degree", since the other three readings of bachelor would require a male subject. However one can easily imagine situations in which this sentence would immediately be interpreted as meaning that the aunt is a spinster rather than that she holds an academic degree. (McCawley 1968: 130)

The fact that (11), as an *utterance*, might in certain circumstances mean that my aunt is a spinster does not mean that the feature /+male/ cannot appear in a specification of the signification of the word *bachelor*. The fact that this word may take on a value which is at variance with its signification does not mean that the latter is wrong, any more than the fact that *brother* and *male sibling* have different values means that the semantic specification of *brother* as *male sibling* is wrong. What it does mean is that signification does not, and of its nature cannot, provide all the information necessary for the interpretation of utterances. The basic mistake of Katz and Fodor is to suppose that it can, and this mistake is carried over into McCawley's criticism. Whereas the tendency of Katz and Fodor is to suppose that meaning resides wholly in signification, the tendency of McCawley seems to be to suppose that meaning resides wholly in value.

6.2.1. Applying the distinction: perfective aspect

We shall return to the question of interpretation presently. Meanwhile let us see how the distinctions we are making here can help to clear up one of the confusions which troubled us in the previous chapter. This has to do with the fact that linguists have to illustrate the operation of a particular linguistic feature by citing a particular structure. Now the difficulty is that linguistic features do not remain as atomic semantic elements but are compounded with other features and therefore take on different values according to what company they keep. Chomsky's discussion of the perfective, which was referred to in the previous chapter (5.3.2), provides an illustration of this.

Chomsky points out that the following:

(12) *Einstein has visited Princeton.*

presupposes a denial of

(13) *Einstein has died.*

No such presupposition, however, attaches to:

(14) *Princeton has been visited by Einstein.*

Now if one compares (12) with the following:

(15) *Einstein visited Princeton.*

one is inclined to associate this presupposition with the perfective and to include it within the signification of this linguistic form. But it is clear from a consideration of (12) and (14) that such a presupposition is a function of the perfective

aspect in association with the active voice. The perfective takes on a different value, therefore, depending on the other linguistic elements it combines with. Nor is it only a combination of perfective and active which creates this presupposition. It is necessary too for the noun phrase which serves as the surface subject to be singular, at least in the case of these noun phrases being Proper nouns. Thus, although

(16) *Marco Polo has climbed Everest.*

carries with it the presupposition that Marco Polo is still alive, such a presupposition disappears when Marco Polo is joined by someone else:

(17) *Marco Polo and Hillary have climbed Everest.*

The conjoined noun phrases change the value of the perfective just as does the passive in (14).

As we have noted, there is a tendency for linguists to claim a certain signification for a linguistic element and then support this claim by citing evidence in the form of invented sentences. Following this procedure in this case might lead us to say that it is part of the meaning of the perfective to suggest ongoing life, or something of the kind, by citing (12) and (15) together and by pointing to the oddity of the following (in much the same way as Postal uses the oddity of (47) in the previous chapter (5.2.2) as evidence for *his* claim):

(18) *Einstein has visited Princeton but he died three years ago.*

6.2.2. Applying the distinction: progressive aspect

Let us consider another case where signification and value are not distinguished. This has to do with the “meaning” of the progressive aspect this time. In Palmer (1965) we find the statement:

Where a point in time is indicated by an adverbial, the progressive and non-progressive differ in their temporal relations to that point of time. The progressive always indicates activity continuing both before and after the time indicated. The non-progressive indicates either simultaneity or, more commonly, immediate succession. (Palmer 1965: 78)

Palmer then provides the following as evidence to support the distinction of meaning that he is making:

(19) *When I saw him, he was running away.*

(20) *When I saw him, he ran away.*

One can agree that *in these instances* the progressive indicates continuing activity and the non-progressive successive activity and that an utterance of (19) would mean that “he” was running away before and after I saw him, and that an utterance of (20) would mean that the running away occurred after I saw him, and perhaps as a result of my seeing him. But these meanings are not part of the signification of the progressive and non-progressive: they have to do with the value these forms have in these contexts. In the following, for example, the progressive does not have the value of “continuing action”:

(21) *When I shot him, he was running away.*

(22) *When I stopped him, he was crossing the street.*

In both these cases, the action referred to in the main clause is certainly not represented as continuing after that referred to in the adverbial. Thus the progressive takes on a different value when it is associated with verbs like *shoot* and *stop*. Furthermore, if the adverbial is moved from thematic position, the value of the progressive as an indication of non-continuing action seems to be made more positive:

(23) *He was running away when I shot him.*

(24) *He was crossing the street when I stopped him.*

and if one adds commas, the effect seems to be made even more positive:

(25) *He was running away, when I shot him.*

(26) *He was crossing the street, when I stopped him.*

It would seem clear, then, that it is not true that the progressive “always indicates activity continuing both before and after the time indicated” and this cannot be a part of the signification of this form.

Palmer’s remarks about the meaning of the non-progressive form are open to the same objections. He says that “the non-progressive specifically excludes overlap” (Palmer 1965: 78) and supports this contention with the following example:

(27) *When I arrived, he shouted three times.*

He comments: “All three shouts followed my arrival here.” But if we adjust this example to read:

(28) *As I arrived, he shouted three times.*

the value of the non-progressive form alters. It is no longer the case that the shouts follow the arrival. One could in fact argue that it is not so much the form of the verb as the use of *when* as opposed to *as* in the adverbial that indicates the relationship between the events in these instances. Thus, taking the following examples:

(29) *When he fell down, he bumped his head.*

(30) *As he fell down, he bumped his head.*

one could argue that an utterance of the first implies that he bumped his head after the action of falling was complete (that is to say on the ground) whereas an utterance of the second implies that he bumped his head in the actual action of falling (that is to say on the corner of the table, for example). At all events, it would seem reasonable to suppose that the meaning of (27) has as much to do with the choice of *when* as opposed to *as* as with the choice of the non-progressive as opposed to the progressive form. It may also have something to do with the thematization of the adverbial, since the following:

(31) *He shouted three times when I arrived.*

does not seem to lend itself so readily to the gloss that “all three shouts followed my arrival here”.

6.2.3. *Exemplification and representation*

The fact that linguistic elements vary in value depending on their association with other linguistic elements in context makes it very difficult to demonstrate the signification of such elements by providing examples in the form of sentences. It becomes virtually impossible to distinguish between a sentence as a device for the *exemplification* of an abstract linguistic element and a sentence as a *representation* of a potential utterance. They both look alike on the page. As we have seen, there is a tendency among some linguists at least to confuse these two functions so that when they speak of the “meaning” of sentences, or reject a sentence as unacceptable, it is not clear whether they are talking about signification, which has to do with the sentence as an exemplification of a linguistic abstraction, or about value, which has to do with the sentence only in so far as it is the representation of a potential utterance. It is extremely difficult to assess the validity of linguistic statements when it is not clear what status the evidence is meant to have and what point it is meant to prove.

As a further illustration of what I mean by “exemplification of a linguistic abstraction” as opposed to “representation of a potential utterance”, we might consider a number of remarks by Firth. Firth quotes the following as a typical “grammar-book” sentence:

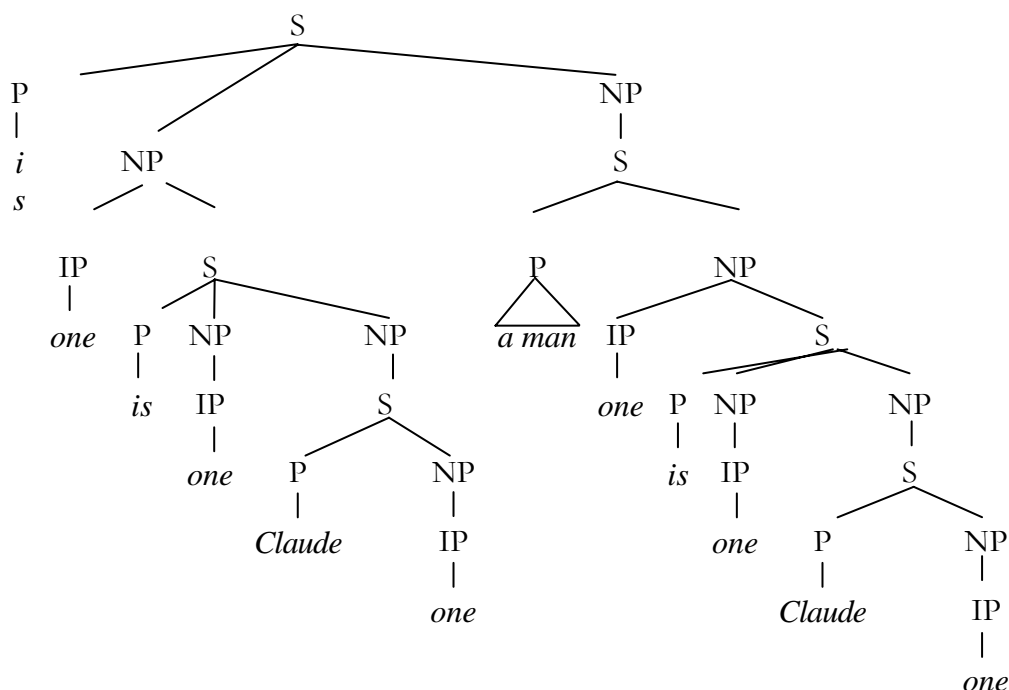
- (32) *I have not seen your father's pen, but I have read the book of your uncle's gardener.*

He comments that although this illustrates grammatical structure, “From a semantic point of view it is just nonsense” (Firth 1957: 24). The point is that it is intended as an exemplification of certain linguistic features of the system of English and not as the representation of a potential utterance. As such it has signification. What Firth means when he says that it is “just nonsense” is that it has no value. This is true, but then since the sentence is not – or we assume is not – being offered as a representation of a potential utterance, it cannot possibly have any value, by definition. Firth’s adoption of a “monistic” approach to language description which involves a rejection of the de Saussurean dichotomy naturally leads him to ignore the kind of distinction which I am trying to make here. For Firth, the only meaning which counted was that associated with value. Thus, he is suspicious of attempts to establish meanings of linguistic elements in isolation from the use of such elements in “contexts of situation”. The approach he takes “requires that all language ‘text’ can be attributed to participants in some context of situation”. And he adds:

Logicians are apt to think of words and propositions as having ‘meaning’ somehow in themselves, apart from participants in context of situation. Speakers and listeners do not seem to be necessary. I suggest that voices should not be entirely dissociated from the social complex in which they function and that therefore all texts in modern spoken languages should be

regarded as having 'the implication of utterance', and be referred to typical participants in some generalized context of situation. (Firth 1957: 226)

The point is that words and propositions do have meanings quite apart from participants in contexts of situations and it is the task of the logician and the grammarian to establish what these meanings are. The fact that when doing so they use sentences as exemplificatory devices should not mislead us into supposing that such sentences are being represented as having "the implication of utterance". Only if it is value which is being demonstrated does implication of utterance become relevant. It is of course to avoid involvement in such implication of utterance that many linguists have used the formulae of formal logic to represent signification (see, for example, McCawley 1968; Leech 1969), or branching diagrams like the following which cannot possibly represent a potential utterance:



(Langendoen 1969: 101)

It is where the exemplification of the operation of the code takes the form of a sentence that difficulties arise. It may be, for example, that there are sound syntactic reasons for saying that the following:

(33) *This is the malt the rat the cat the dog chased killed ate.*

is a correct exemplification of the linguistic system of English, whereas the following:

(34) *An apple was not eaten by John.* (Seuren 1969: 105)

is not. But as representations of potential utterances there is no obvious way of choosing between them: they are both very odd, and if anything the incorrect one is more acceptable in that one can just conceive of a situation in which such a

sentence might be uttered, whereas the only possible use for (33) that I can think of is as a citation form to exemplify the language system. It is not helpful to say that (34) “according to many speakers of English, is ungrammatical” (Seuren 1969: 105) because many speakers of English would also reject (33) as ungrammatical. In both cases their judgement would be based on a criterion of “implication of utterance” which is not relevant to the question as to whether or not these sentences are a correct exemplification of the language system.

The difficulties involved in keeping apart the two ways in which sentences can be considered become insoluble when the scope of grammatical statement is extended to cover the use of the code, as when features like presupposition and illocutionary force are incorporated into the grammar. Here a sentence can only serve as a satisfactory exemplification to the extent that it is also a representation of a potential utterance. This would mean that (33) would be marked as ungrammatical and (34) as grammatical, if one accepts that the latter would be a possible utterance whereas (33) would not. Furthermore, if one wished to show that a pair of active and passive sentences were related syntactically but at the same time were used to imply different presuppositions as utterances, there would be no clear way of doing so. Let us consider again Chomsky’s two sentences (12) and (14) repeated here as (35) and (36):

(35) *Einstein has visited Princeton.*

(36) *Princeton has been visited by Einstein.*

Now if one wishes to use these sentences simply to exemplify the syntactic operations of passivization and to demonstrate the synonymy of signification of active and passive sentences, then (35) and (36) have the same function as do any other sentences which show the same relation, as for example:

(37) *The dog bit the man.*

(38) *The man was bitten by the dog.*

It does not matter which lexical items are chosen so long as they have the appropriate syntactic specification (the verb, for example, must be transitive), since their sole purpose is to give concrete realization to an abstract linguistic pattern. One can choose unicorns or pterodactyls or even morphologically adapted nonsense words. If, however, there is a conflation of the functions of exemplification and representation, as these notions have been defined previously, then the lexical items become of crucial importance. (35) and (36) can no longer be said to exemplify the same phenomenon as (37) and (38), and the former pair can no longer be shown as having the same signification because signification now becomes indistinguishable from value, and as representations of potential utterances these sentences must be assigned different values by virtue of the fact that (as we have noted in 5.3.2) there are different presuppositions associated with each.

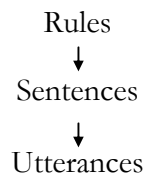
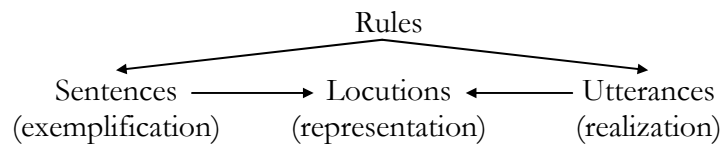
6.3. Sentence, locution and utterance

In view of these difficulties, and of the imprecise way in which linguists tend to use the terms “sentence” and “utterance” which was noted in the previous chapter, it would seem to be desirable, bearing in mind the practical orientation of this

study, to introduce certain terminological distinctions to simplify matters. We will say that a *sentence* is an exemplificatory device and that its function is simply to give concrete realization to the abstract features of the system of the language. From this point of view a language is not seen as consisting of sentences which it is the grammar's function to describe but as an abstract system of relations which the grammarian exemplifies by the invention of sentences. The speaker of the language draws on his knowledge of this abstract system in order to make utterances, and we will refer to the representation of a potential utterance in the form of a sentence in the more general sense as *locution*. Thus what was previously referred to as a sentence as an exemplification of a linguistic abstraction we will now call a sentence, *tout court*, whereas what we have been referring to as a sentence as a representation of a potential utterance we will call a locution. It would have been possible to make this distinction in terms of Garner's type/token and act/object divisions (Garner 1971) but this would introduce a degree of refinement which (no matter how theoretically desirable) would not I think be appropriate for the essentially practical purposes we have in view in this study.

We now turn to the question which has been so troublesome throughout this study: what is the relationship between sentence and utterance. It is common to find linguists referring to utterances being "derived" from sentences, or sentences "underlying" utterances as if the speaker had a set of sentences in his mind which were realized in utterances in a kind of type/token fashion, the tokens not matching the types because of various kinds of performance interference. Generative grammarians have always been at pains to point out that their grammar is not in any sense a performance model and that the rules they postulate do not match mental processes. At the same time they have a way of suggesting that a sentence does have some kind of psychological reality and they talk of the native speaker's knowledge of the sentences of his language.

The view taken here is that sentences are simply constructs devised by linguists to exemplify the rules of the language system and that the speaker therefore has no knowledge of the sentences as such at all. He has a knowledge of the rules and he composes his utterances by direct reference to them and not by reference to sentences. One might say that sentences exemplify the rules which the speaker realizes in the making of utterances. There is no direct relationship between sentences and utterances at all: the relationship is mediated through the rules. Thus we have a picture of this relationship not as shown in diagram I but as shown in diagram II:

*diagram I**diagram II*

What diagram II is meant to show is that sentences are an exemplification of linguistic rules. When “sentence-like” objects are intended as representations of potential utterances, they become locutions. Utterances are a direct realization of linguistic rules.

I believe that the kind of view of language as represented by diagram I has led to considerable misunderstanding and is a serious obstacle to our understanding of the nature of discourse. It would appear to underlie the “systematic ambiguity” which Chomsky resorts to whereby “grammar” means both “the native speaker’s internally represented ‘theory of his language’” and also “the linguist’s account of this” (Chomsky 1965: 25. See also Matthews 1967: 121). This suggests that the knowledge one has of one’s language can be expressed in the form of sentences since a grammar is defined as a description of the sentences of L. What the speaker of a language knows is sentences. This comes out clearly when Chomsky speaks of language acquisition:

Clearly, a child who has learned a language has developed an internal representation of a system of rules that determine how sentences are formed, used, and understood. (Chomsky 1965: 25)

This conforms to what is represented in diagram I. Adopting the view represented in diagram II one would say that the child learns a system of rules that enable him to form and understand utterances. One can speak of the use of a sentence (as does Strawson, cited in 5.2.3 above) if by sentence one means locution, but to do so in the context of a discussion on language acquisition suggests that the child learns sentences which it afterwards converts into utterances.

6.4. Grammaticalness and interpretability

That this view has unfortunate consequences for the study of discourse is well illustrated by the much-discussed problem of grammaticalness and interpretability. This problem takes us to the very heart of discourse analysis and a consideration of it should demonstrate the usefulness or otherwise of the view of the sentence/utterance relationship which I have been propounding, and of the distinction between signification and value which is related to it.

The problem, as the generative grammarian sees it, is described clearly in Katz (1964). He points out that speakers of a language are able to understand not only “well-formed utterances of their language (sentences)” but also utterances which are not well-formed, which he calls “semi-sentences”. Now the question is: if a grammar represents the speaker’s knowledge of his language, how does it

come about that the speaker can understand “semi-sentences”, which are not generated by the grammar? It would seem that the speaker knows more than the grammar would give him credit for. But does this mean that the grammar can only account for the speaker’s knowledge of well-formed sentences and can say nothing about those which are not well-formed? Katz gives reasons for denying this:

A semi-sentence is, after all, partly grammatical. Hence the knowledge that enables a speaker to understand sentences – his knowledge of the rules of the grammar – must be identically the knowledge that enables him to understand semi-sentences, for semi-sentences are understood in terms of their well-formed parts. (Katz 1964: 401)

But as Katz observes if one takes this view, one comes up against a paradox:

Though the knowledge a speaker requires to understand well-formed sentences and the knowledge he requires to understand semi-sentences is one and the same, and though a generative grammar can represent all the grammatical knowledge a speaker has and can account for how he is able to understand sentences, yet such a grammar cannot account for how a speaker is able to understand semi-sentences. (Katz 1964: 402)

Katz resolves this paradox by contradicting himself. Although the knowledge required for an understanding of both sentences and semi-sentences is “one and the same”, it appears that:

The task a speaker performs when he understands a semi-sentence involves, in addition to his use of grammatical knowledge, the use of knowledge of another kind. (Katz 1964: 402)

This knowledge of another kind Katz proposes to account for by what he calls a “theory of semi-sentences” which will show how the grammatical and ungrammatical parts of the semi-sentence combine to form a structure which is comprehensible to speakers. But although he calls this knowledge “knowledge of another kind” he still conceives of it as essentially grammatical knowledge. This is clear from the distinction he makes between semi-sentences (SS) and nonsense strings (NS). The difference between these is partly one of degree: SS are deviant but not to the extent of being rendered incomprehensible whereas NS are so deviant as to have no structure at all. But the difference is also shown as one of kind. NS can have structure, but it is not “of the right sort to be comprehensible to speakers” or if it is, the comprehension does not derive from the right kind of mental operation. NS are understood, when they are understood, by something other than “purely linguistic skill” whereas SS are not:

... in the case of understanding a semi-sentence a speaker utilizes his knowledge of the structure of the language to find a meaning for something that is not well-formed ... (Katz 1964: 414)

This knowledge of another kind that Katz refers to turns out in fact to be knowledge of very much the same kind as that required for the interpretation of well-formed sentences. The paradox remains unresolved.

6.4.1. *Interpretation by reference to signification*

In fact the paradox cannot be resolved, as I hope now to show, because a grammar cannot possibly include all the speaker needs to know for the interpretation of utterances even when it is supplemented by a theory of semi-sentences such as Katz proposes. Katz believes that a semi-sentence is interpreted by the speaker's associating it with a set of well-formed sentences, which he calls its "comprehension set", by means of what he calls "transfer rules". He says that what happens when a speaker is confronted with a semi-sentence is that he relates it with a set of well-formed sentences which he recognizes to be structurally alike, and which he recognizes to be paraphrases of the structurally defective semi-sentence. Thus the comprehension set of the following:

(39) *Man bit dog.*

would, according to Katz, contain the following (among others):

(40) *The man bit the dog.*

(41) *A man bit a dog.*

(42) *The man bit some dog.*

(43) *Some man bit a dog.* (Katz 1964: 411)

One of the difficulties here (as is pointed out in Seuren 1969: 20) is that (40)-(43) are not in fact paraphrases. If (39) is to be considered a defective form of any of them, therefore, there is no way of providing it with a unique interpretation. The same difficulties arise with Katz's other examples. Thus, the following:

(44) *Scientists truth the universe.*

is provided with a comprehension set which includes:

(45) *Scientists study the universe.*

(46) *Scientists discover facts about the universe.*

One might allow that these are paraphrases and therefore the requisite transfer rule would assign (44) with an interpretation quite unambiguously. But it is easy to see that (44) could be understood in other ways as well, as again Seuren points out:

(47) *Scientists make the universe a true universe.*

(48) *Scientists test the universe.* (Seuren 1969: 18-19)

Seuren's criticism of Katz's proposals is aimed at showing that the distinction between SS and NS is untenable but he does not question the main premiss that the interpretation of utterances has to do with the reconstitution of grammatical structure. He too thinks of interpretation as deriving from a knowledge of grammar. In commenting on (39), for example, he says that "it is perfectly well-formed according to a grammar 'derived' from the grammar of English, namely the grammar of newspaper headlines." (Seuren 1969: 19). But why should (39) be considered as a newspaper headline? To consider it as such is to provide the semi-sentence with a context and to say, in effect, that its interpretation does not de-

pend on internal structural evidence alone and therefore ceases to be a purely grammatical matter. Seuren adds:

We know, for example, that the most likely “full” English sentence corresponding to [(39)] is: [(49)] A man bit a dog. (Seuren 1969: 20)

This can only be said to be “most likely” as a paraphrase of (39) if one is thinking of it simply as a newspaper headline. But it would be interpretable in other contexts as well where it would take on a different meaning. Furthermore it is difficult to see why (49) should represent the most likely “full” English sentence corresponding to (39), even if one does consider the latter as a headline. Why should it be preferable to say:

(49) *Some man bit some dog.*

for example? And if the headline refers to something already familiar to the reading public, then there would be a strong case for saying that definite reference needed to be indicated. Thus, to take a recent case, the headline:

(50) *Enquiry blames driver.*

would not be understood by relating it to a corresponding sentence of the form:

(51) *An enquiry blames a driver.*

If one needs to cite a corresponding sentence at all, then it would have to be of the form:

(52) *The enquiry blames the driver.*

This is because the readers of the newspaper would already know about the train crash, the suspicion that the driver was drunk, and the setting up of a public enquiry to investigate the matter. No grammar of headlines could possibly indicate these factors necessary for the correct interpretation of (51): all it could do would be to establish certain general principles of deletion. It could tell us that in headlines determiners and certain auxiliary elements are deleted, but it cannot tell us which.

But apart from this, it is difficult to see why it is necessary to say that interpretation involves reference to a corresponding “full” English sentence. Newspaper headlines have a similar function to labels: they give an indication of contents. There seems to be no reason why one would wish to say that an interpretation of (39) involves invoking a corresponding sentence like (40)-(43) or (49) any more than one would wish to say that to interpret something like:

(53) *GLASS*

one has to relate it to a corresponding sentence of the form:

(54) *There is glass in this packing-case.*

It would seem, then, that the attempt to account for how utterances are understood in terms of corresponding or underlying sentences is not likely to take us very far. There is no way of restoring missing structural information in such a way as to transfer meanings from well-formed sentences to utterances which do not

conform to the rules of the grammar. It is not only that SS are not uniquely interpretable, however. It is also possible to find attested instances of what Katz would characterize as NS, and which should therefore be uninterpretable, which present no difficulties of interpretation at all. The following is such a case:

- (55) *Me up at does*
out of the floor
quietly Stare
a poisoned mouse
still who alive
is asking What
have i done that
You wouldn't have (e.e. cummings)

As Chomsky observes:

This poses not the slightest difficulty or ambiguity of interpretation, and it would surely be quite beside the point to try to assign it a degree of deviation in terms of the number or kind of rules of the grammar that are violated in generating it. (Chomsky 1965: 228)

By the same token, it would be quite beside the point to try to account for its interpretability by setting up a comprehensive set of corresponding sentences. But if (56) can be interpreted without recourse to such a procedure, why is it that such a procedure is necessary for the other cases we have been considering?

Katz's attempt to explain the interpretability of utterances which do not correspond with the sentences of a generative grammar by means of a theory of semi-sentences is unsatisfactory. This is because it is based on the view of the sentence/utterance relationship which is represented in diagram I above. In fact, as far as Katz is concerned well-formed utterances *are* sentences, just as those which are not well-formed are semi-sentences, and this leads him to assume that what is involved in the understanding of an utterance has to do exclusively with the grammatical properties of the products of a generative grammar. For him, a speaker's knowledge of his language amounts to his knowledge of the grammatical structure of sentences and this knowledge is at the same time what lies behind the speaker's ability to understand utterances. This is clear from the following passage:

... it is the aim of grammar construction to discover what a speaker knows about grammatical structure that enables him to understand utterances in his language. (Katz 1964: 401)

The view taken by Katz of the sentence/utterance relationship and the assumptions about interpretability and grammaticality which derive from it are shared by Chomsky (1961/64) and Ziff (1964). Indeed Ziff never makes mention of sentences, but talks throughout his paper as if utterances were directly generated by the grammar, a practice which, as is observed in Bar-Hillel (1967), leads him into all kinds of error. Essentially the view is that an utterance is interpreted by relating it to a sentence and if the utterance is deviant it is interpreted by "exploiting whatever features of grammatical structure it preserves and whatever

analogies we can construct with perfectly well-formed utterances.” (Chomsky 1961/64: 384). I have criticized the formulation which Katz gives to this view in his theory of semi-sentences. There are two more general points that have to be made: discussion of these points will lead us to an alternative approach to the question of how utterances are interpreted.

6.4.2. *Interpretation with reference to value*

The first point is that the Chomsky-Katz-Ziff view allows only for a paradigmatic relationship between utterances or between utterance and sentence. That is to say, the assumption is that the interpretation of an utterance will depend only on relating it with a parallel structure of some kind, and this presupposes that the meaning of the utterance is self-contained within its own structure. There is no suggestion that its meaning, and therefore its interpretation, might also depend on the syntagmatic relationships which the utterance has with other utterances in the context of discourse. This exclusive consideration of paradigmatic relationships is a consequence of course of equating sentence and utterance. Since the grammar does not deal in units of greater extent than the sentence, and since the grammar is required to account for the ability of a speaker to interpret utterances, then the utterances cannot but be considered as self-contained units. But utterances never are self-contained units. One can produce a sentence as an isolated unit for the purposes of exemplification but utterances do not occur in isolation, so it makes no sense to ask what a single utterance means unless a context is provided. This fact has invalidated a good deal of psycholinguistic research in the past. Subjects have been given a sentence and have been asked what it means, and conclusions have been drawn about the relation between grammatical complexity and difficulty of interpretation (see Fodor and Garrett 1966). But no conclusions can be drawn from such experiments about the way people understand utterances, since they are never called upon to understand an isolated utterance. It is of the very nature of utterances that they are dependent upon each other.

The paradigmatic association which is set up by means of the kind of paraphrase procedure which Katz proposes, or, as Chomsky puts it, by the construction of analogies can only yield the semantic meaning of an utterance – the meaning which I have called signification. In effect, this is to treat utterances as locutions. Whereas linguists like Postal and Karttunen, in the work reviewed in the previous chapter (5.1.1 and 5.1.2), treat sentences as the representation of utterances, Katz, Chomsky, and Ziff treat utterances as the representation of sentences. What is neglected in both cases is value: the meaning which linguistic elements assume in actual contexts of use. And value can only be established by considering the kind of syntagmatic association which utterances contract with other utterances: it cannot be discovered by studying them in isolation.

The second point is that to account for interpretation in terms of a relationship between utterance and sentence necessarily imposes upon language behaviour the idealization upon which a description of the language system depends, and thereby misrepresents the nature of this language behaviour. Put another way, having abstracted *langue* from *langage* one proceeds to force *langage* back into

langue. Generative grammar is based on the idealized notion of language as a well-defined system and facts like variation and change are ignored. As was argued in Chapter 2, it is perfectly valid to restrict the scope of linguistic statement in this way. What is not valid, however, is to extend this restriction to cover language itself, and this, I suggest, is what Katz and others in effect attempt to do.

As is pointed out in Labov (1970), Hymes (1962), and elsewhere, language is of its nature heterogeneous and changeable. The generative grammarians themselves acknowledge this and to some degree account for it in the very generative capacity of their grammars, and in particular in their allowing for recursion. At the same time the proposals for linking grammaticalness and interpretability that we have been considering inevitably suggest that the signification of linguistic elements defined within the idealized system of the language is carried into context without change, that when using language people conform to a rigid and pre-established code. If this were the case there would, of course, be no way of explaining language variation and change, nor the essentially normal use of “figurative” language. Generative grammarians have stressed the creativity of human language but they have tended to define this in terms of an ability to generate sentences. Yet this creativity also involves the ability to produce and understand utterances which do not conform to the sentences of a generative grammar, which are not, in our sense, locutions, and which cannot therefore be interpreted solely by reference to the grammar.

The mistake that generative grammarians have made, then, is to assume that the signification of linguistic elements which can be exemplified by sentences is identical to the value they take on when they occur in utterances. One is tempted to suggest that it is one of the unfortunate effects of studying language without studying actual language behaviour, of considering it as an intricate piece of machinery rather than as “the instrument of communication used by the speech community.” (Labov 1970: 33).

6.5. The realization of value

Having argued that the meaning of utterances is a matter not of signification but of value, this notion of value must now be considered in greater detail. We may begin by considering some remarks made by the Prague linguist Skalička who, like many of his school, was not content to confine linguistics to the study of *langue* but wished to extend its scope to include features of language use. He conceives of *langue* not as a set of sentences but as “a system of semiological devices, more or less fixed, expressing reality” which he also refers to as “a collection of rules”. (Skalička 1948/1964: 378). The reality which these devices or rules represent is an ideal one so it cannot be expressed as such in actual speech (see also Mathesius 1936/1964: 307-8). Now if this ideal reality cannot be expressed in speech, the question arises as to how *langue*, the repository of this reality, is related to *parole*, the actual acts of speech. This is what Skalička says:

In speech new reality attacks *langue*. The task of speech is to harmonize the new reality with the old, i.e. with experience. This means: to represent the new reality by more or less fixed images. Speech is thus a synthesis of the

old *langue* and the new reality ...

Of course, both sides change in speech: the new reality is more or less truly represented, or misrepresented, and the system of images, which make up *langue*, is somewhat changed. Both changes may be either superficial or deep.
(Skalička 1948/1964: 380-1)

We have the picture here of the meaning of utterances deriving from some kind of synthesis of a *langue* meaning representing “Ideal reality”, which I have called signification, and a meaning which is associated with some “new reality” which the speaker wishes to express, and the synthesis has the effect of modifying both. Skalička goes on to point out that this synthesis is not always easy to achieve, and the passage in which he does so is of particular relevance to later discussions in this study:

... it is very difficult to equalize experience with new reality if we have to express our attitude to some scientific question in the words and forms at our disposal. Scientific utterances are meant to express reality far removed from experience, just like philosophical or literary utterances.
(Skalička 1948/1964: 381)

We may note that the sentence/utterance equivalence which we have been criticizing will not allow for the expression of novel experience and new reality in Skalička’s sense would be incommunicable.

6.5.1. Code and context

Jakobson has much the same concept of the way *langue* and *parole* are related, and of how language operates in actual use, but he provides a more precise formulation in terms of code and context. Following de Saussure, he recognizes two modes of arrangement for linguistic signs, selection and combination:

...selection (and correspondingly, substitution) deals with entities conjoined in the code but not in the given message, whereas, in the case of combination, the entities are conjoined in both or only in the actual message. The addressee perceives that the given utterance (message) is a *combination* of constituent parts (sentences, words, phonemes, etc.) *selected* from the repository of all possible constituent parts (code).
(Jakobson and Halle 1956: 61)

As is clear from preceding discussion, I would not wish to think of the sentence as an entity in the same sense as words are entities, not a constituent part in the repository of the code, but rather as an exemplification of an abstraction, comparable to a paradigm presented in tabular form to exemplify relations on the other axis of arrangement. But Jakobson’s principal argument here is consistent with the idea being developed in this study of the utterance having dual dependence for its meaning: on the code on the one hand and on the context on the other. Jakobson goes on to talk about the way interpretation depends upon two “interpretants”: the code and the context:

A given significative unit may be replaced by other, more explicit signs of the same code, whereby its general meaning is revealed, while its contextual

meaning is determined by its connection with other signs within the same sequence. (Jakobson and Halle 1956: 61)

Jakobson's "significative unit" corresponds to what we have been referring to, somewhat loosely, as a linguistic element; his "general meaning" corresponds to what we have referred to as signification and his "contextual meaning" to value. Thus, to refer back to previously cited examples (6.2), *brother* and *male sibling* would share the same general meaning, or signification, as would sentences assigned the same deep structure like (1) and (2) in Fillmore's system or (12) and (14) in that of Chomsky (1965) (6.2.1). Whether two significative units share the same general meaning or not will be a matter of controversy, of course, since it will depend on which model of grammar one chooses to adopt, what underlying syntactico-semantic relations one can discover, and what paraphrase criteria one accepts. For our present purposes we do not need to get involved in this controversy. Our concern is to establish that it is necessary to recognize signification as a property of the language system which falls, therefore, within the scope of grammatical statement and to distinguish it from value which is not such a property and cannot be described in grammatical terms. The examples of signification synonymy which will be used later will be those most generally accepted by grammarians and most commonly assumed by language teachers: active and passive structures, for example, preposed adjectives and relative clauses, and the variable placement of the adverbial.

I have said that Jakobson's "contextual meaning" corresponds to value. However, Jakobson seems to be suggesting in the passage cited above that contextual meaning is entirely a function of the relationship which a unit contracts with others in context. I would wish to say that value is not *determined* by the context but is a function of the *inter*-relationship between code and context. This is simply to say that the code meaning, or signification, of linguistic elements must play a part in the meaning of utterances. Searle makes much the same point when discussing a definition of meaning suggested by Grice. Grice defines the meaning of an utterance only by reference to the intentions of the speaker and his success in conveying these intentions to the hearer. Searle points out that meaning must also be a matter of convention as well as intention:

We must, therefore, reformulate the Gricean account of meaning in such a way as to make it clear that one's meaning something when one utters a sentence is more than just randomly related to what the sentence means in the language one is speaking. (Searle 1969: 45)

Here "what the sentence means in the language" represents the conventional aspects of the utterance which we have called signification.

Drawing on the notions of Skalička and Jakobson, we will say that the value of an utterance or part of an utterance is a function of two kinds of relation: that which it has with the language code and that which it has with the context in which it occurs. Value depends, therefore, on signification. One cannot give a value to a linguistic item which is contrary to its signification. One cannot, to cite Wittgenstein's famous example:

- (56) Say “*it’s cold here*” and mean “*it’s warm here*”. (Wittgenstein 1953: para 510)

It might be objected that this denies the possibility of paradoxical statements such as:

- (57) *Arthur is both weak and strong.*

But the point about such lexemes as *weak*, *strong*, and innumerable others is that their semantic specification does not restrict the scope of what they can refer to so that they can take on a range of values in association with other lexemes which are quite distinct in the code. Thus one can gloss (58) as meaning something like: *Arthur is physically weak but mentally strong*, or *Arthur is weak in physics but strong in chemistry*. A paradox can only be recognized as such by invoking a knowledge of the signification of the linguistic elements involved, and it can only be resolved by giving different values to these elements by associating them with lexical items which do not have irreconcilable significations.

Value depends on signification: this is a synchronic statement in the sense that it refers to the process whereby at any point in time code meanings are conditioned by the contexts in which they occur. It is a statement about the way communication is effected. Signification depends on value: this is a diachronic statement. It refers to the way new meanings enter into the language code and the way semantic change takes place. A live metaphor, for example, is an illustration of the dependence of value on signification: a dead one is an illustration of the dependence of signification on value.

Interpretation, then, depends on a recognition of value, and value is recognized by correlating the signification of linguistic elements with features of the context or the situation of utterance. In simple terms, when we interpret an utterance we adjust the code meaning so that it conforms to the meaning that the context or the situation requires it to have. Thus the meaning of an utterance is not arrived at by the process of amalgamating code meanings, as is suggested in Katz and Fodor (1963/1964). If it were, then, as was pointed out earlier in this chapter (6.2), the utterance:

- (58) *My aunt is a bachelor.*

would *have* to mean: *My aunt is a holder of the degree of bachelor*. One can argue that (59) *as a sentence* has to mean this, because the Katz and Fodor proposals do not allow for anything else, but to say that it must also have the same meaning *as an utterance* is to suppose that communication is entirely restricted to the statement of pre-ordained meanings.

6.5.2. Value in literary discourse

The Chomsky-Katz-Ziff view of what constitutes interpretability is presented with reference to ungrammatical sentences or, which for them amounts to the same thing, deviant utterances (See Bar-Hillel 1967). It will be profitable to follow the same line in illustrating the counterproposal that has been put forward that interpretation is a matter of establishing value. Rather than deal with locutions, how-

ever, and thus get involved in the very difficulties from which we have been trying to extricate ourselves, we shall deal with actually attested utterances. The obvious place to find deviant utterances is in literary writing, and in particular in poetry, so I will consider what is involved in the interpretation of literary discourse. This is not an irrelevant indulgence. An understanding of how this form of discourse works will lead us to an approach to the analysis of discourse in general.

The problem of grammaticalness and interpretability was, of course, commonly exemplified by reference to extracts from poetic texts, and much of the motivation for stylistic analysis derives from a desire to solve the problem. Thus we find in Levin (1962) an extension of the Chomsky-Katz-Ziff discussion to cover attested instances of deviance like Dylan Thomas' *a grief ago* and Cummings' *he danced his did*. Levin points to the difficulties involved in what he calls "fixing" the grammar so that it will generate strings like these without at the same time generating others which are "unwanted" in the sense that they are not attested. In other words, how can a grammar be modified in such a way as to yield the sentence

(59) *He danced his did.*

without at the same time yielding an "unwanted" sentence like:

(60) *We thumped their hads.*

But Levin misses the point here. A grammar is not intended only to generate sentences (locutions in our sense) which correspond to attested utterances. It is an often-stated principle of generative grammar that it should account not only for existing textual data but sentences which have never been seen or heard before: otherwise, of course, the grammar could not even account for that aspect of creativity which it at present does account for. It follows then that if one wishes the grammar to generate the sentence represented by (60), one must accept as a matter of principle that it must also generate (61). The fact that (60) is observed whereas (61) is not is irrelevant, since a grammar is not designed only to account for observed instances. Thorne too (whose example (61) is) appears to accept that it is permissible to overlook this basic principle and to restrict the grammar's scope, *in this case*, to observed utterances. His objection to fixing the grammar to include (60) but to exclude (61) is that it would involve great complexity:

The dilemma facing anyone who regards the task of stylistics as extending the capacity of grammars to cover all the grammatical sentences plus all the observed sentences seems inescapable and intolerable. Either he must accept a grammar capable of generating a vast number of 'unwanted' sentences or he must accept a grammar containing statements so complex that they become virtually meaningless. (Thorne 1965: 51)

But again Thorne misses the point. To include (60) but exclude (61) would involve complexity and render the grammar which resulted of little practical use, but the main objection is that any grammar which did this would be based on a principle which would be theoretically different from that of generative grammar, and would not be able to cover all the grammatical sentences of English.

Extending the capacity of grammars to cover both all grammatical sentences and all the observed ones is not only impracticable but theoretically impossible. Both Levin and Thorne talk about “unwanted” sentences, but neither is very precise as to what is meant by this. If they mean that they cannot conceive of any circumstances in which one would wish to come out with an utterance like (61), then there are countless sentences which a grammar is capable of generating which would be unwanted in the same sense. Cummings’ line would presumably have been regarded as an “unwanted” sentence before he wrote it, and poets and advertising copy writers are constantly producing “unwanted” sentences in this sense, so that by confining the grammar to observed instances, even if this were a remotely possible thing to do, one is imposing a quite arbitrary restriction on the generative capacity of the grammar.

Thorne’s solution to the dilemma he mentions is to regard (60) and the other deviant utterances in Cummings’ poem as a sample of a different code from that of Standard English. Rather than attempt to adjust a grammar of Standard English to account for an utterance like (60) he proposes that a grammar should be devised to describe the different code. In other words, since it is clear that (60) cannot be accounted for within one code, another code is devised to accommodate it. Underlying Thorne’s proposal is the assumption that has been questioned throughout these chapters: that the meaning of an utterance can only be accounted for in terms of the sentence which is assumed to correspond to it. Since the standard code cannot provide (60) with sentence status, Thorne devises a code which can.

My contention would be that it is not necessary to adduce a corresponding sentence at all but that, on the contrary, to do so is to misrepresent not only the manner in which one interprets utterances, but also the meaning of the utterances themselves. The item *did* in (60), for example, is represented in Thorne’s code as “a member of a subclass of nouns which enter into the formulae which develop objects” (Thorne 1965: 51). But *did* is not only interpreted as a noun in Cummings’ poem. The reader brings to his reading a knowledge of English which makes him recognize *did* as the past tense form of the “dummy” auxiliary verb *do*. *Did* therefore carries with it into the context of the poem its signification as an element of Standard English. It is impossible to understand what (60) means in the context of Cummings’ poem unless one recognizes that part of the *value* of this item derives from its signification in the standard language, and part derives from the context which requires also that it should take on the character of a noun. If therefore one attempts to account for (60) in terms of the standard code, one inevitably loses the information that *did* also has the value of a noun in this context, and if one attempts to account for it in terms of a separate code, as Thorne proposes to do, one inevitably loses the information that part of the value of *did* is that it is the past tense form of the auxiliary verb *do*.

The meaning of an utterance, or of parts of an utterance, cannot then be accounted for simply by reducing it to sentence status, whether in reference to the standard grammar or another of one’s own devising. We must admit the existence of ungrammatical utterances which do not correspond with, and which cannot be

correlated with sentences, but which are nevertheless interpretable. They are interpretable because the signification of their parts as elements of the code is conditioned by the way these parts combine in context, and the way the utterance itself is associated with others in the discourse of which it forms a part. That is to say, the value of *did* in (60) does not only derive from the way this word is conditioned into becoming a noun by being preceded by the possessive pronoun but by the association of the utterance with others of similar syntactic pattern in the poem, like *He sang his didn't; They sowed their isn't* and so on. We might define value as the effect of conditioning signification by context.

So far we have been considering how utterances which have no corresponding grammatical locution acquire the value which makes them interpretable. But it is a general principle that value is a function of code/context correlation, of which the interpretation of deviant utterances serves only as a particular (if particularly striking) example. To illustrate this, we might consider Pope's lines:

- (61) *Here files of pins extend their shining rows,
Puffs, powders, patches, Bibles, billet-doux.*

The second line here is a simple list of items which, as such, has no syntactic structure. Nevertheless, the items are not simply presented in a random order. We notice that the first sound in each of the words is a bilabial plosive unvoiced in the first three words and voiced in the last two. We notice too that the second, third and fourth words have the same syllabic structure. In short, we can see some kind of phonological patterning here such that there is a suggestion that the items being presented share some similarity. The phonological structure, which is not required by the code but is entirely a contextual feature, ensures that this is not a random list but one which collects the items referred to into a set. But whereas *puffs*, *powders* and *patches* are semantically related in the code and would belong to a set under some superordinate like *cosmetics*, and *billet-doux* would belong to a higher order set including the first under the more general superordinate *female trivia*, or something of the sort, *Bibles* has a signification which has no relation to that of the other lexical items at all. The fact that it is grouped with the others and linked with them as part of the phonological pattern of the line, however, has the effect of establishing a semantic relation in context. Part of the value of the word *Bibles*, then, derives from its code signification and part from its association with words which refer to the accoutrements of a lady's dressing table. Its value is that it is represented as being holy writ and an article associated with female vanity at the same time, and only when this is recognized can the irony of the line, which is an essential part of its meaning, be appreciated.

6.5.3. Value in other areas of discourse

In literary stylistics it is clearly crucial to bring value into focus since otherwise, as I have argued elsewhere (Widdowson 1972a, 1973), there is no way of accounting for the unique communicative properties of literary uses of language. But it is equally crucial in other forms of discourse, although it may be less apparent that this is the case. Lehrer has pointed out, for example, that lexical items take on specific values in a particular universe of discourse:

The notion of 'universe of discourse' is relevant to semantic analysis in that certain lexical items contrast paradigmatically in some fields but not in others. (Lehrer 1969: 40)

In our terms, certain lexical items take on certain values in one form of discourse which they do not take on in another. Their signification, however, remains constant in so far as this is a general semantic property of the item as an element in the code. When particular values become widespread over a period of time then, as has already been pointed out (6.2), they take on signification as elements of the code, and therefore within the scope of grammatical (and more specifically semantic) statement. In so far as values are restricted to a particular "universe of discourse" I would prefer to consider them a pragmatic rather than a semantic matter. Lehrer says:

It seems to me that only a semantic theory that deals with the universe of discourse or sociocultural settings can make semantic projections with much accuracy. (Lehrer 1969: 48)

It seems to me, on the other hand, that semantics must operate within the limits of idealization discussed in Chapter 2 and that meanings associated with a particular universe of discourse or sociocultural settings come within the scope of pragmatics. Lehrer elsewhere in her paper speaks of her enquiry as operating at an "intermediate level between the meaning(s) of an item in isolation and its meaning in a specific utterance in a specific speech situation." (Lehrer 1969: 54). It is indeed precisely the intermediate level which we need to study but this is the level at which systematic pragmatic statements about value can be made. The meaning(s) of items in isolation can only mean their code specification, or signification, which it is the business of semantic theory to account for.

Ultimately, of course, the line between signification and value cannot be absolutely defined and the relationship between them is mediated by a continuum. Consequently one can choose to treat values which are consistent within a particular "universe of discourse" as a kind of restricted signification. In which case, one then distinguishes "context semantics" from "code semantics", which is, in effect, what is done in Lehrer (1969), and also in Taylor (1968), where the values (or restricted significations) of certain lexical items in chemical discourse are established just as Lehrer establishes the values (or restricted significations) of certain lexical items in culinary discourse. The difficulty with the notion of context semantics is that it involves, in effect, establishing a different code for each universe of discourse thereby representing it as a well-defined system. But as we noted in Chapter 3 (3.3.1), it is extremely difficult to separate out registers or varieties of use in this way. Furthermore, as will be shown later (in Chapter 10), there are pedagogic reasons for thinking of different kinds of discourse as different uses of common code resources. These reasons lead me to prefer the notion of value to that of restricted signification and to treat it as a pragmatic matter.

Establishing the value of lexical items in a universe of discourse like cookery and chemistry involves essentially the same process as establishing the value of lexical items in poems. In both cases it is a matter of relating code meanings with meanings which the items are required to have in the context. In both cases the

discourse creates its own patterns of language over and above that required by the code and it is because lexical items enter into these patterns that they acquire the values that they do. The difference between culinary and chemical discourse and a poem is that the former are samples from a larger corpus whereas the poem is itself the corpus and represents all the data available. This paucity of data is in some degree compensated for by the fact that the patterns of language are deliberately manipulated in order to provide the values required within this limited discourse. This is what Jakobson (1960) refers to as “the set towards the message” and may be said to characterize poetry as a form of discourse. Even so, as Thorne points out, establishing the value of lexical items in a poem (although he does not of course talk about it in these terms) “sets a high premium on intuition” (Thorne 1965: 55). Hence the assignment of value is not easily validated, which is why definitive interpretations of poems are impossible, and why stylistic analysis can never displace literary criticism. In the case of culinary and chemical discourse, on the other hand, it is possible to test one’s findings against the evidence from other samples. The values one establishes are conventional within the universe of discourse. Poems are poems because they create their own conventions, which only apply within the limits of the poem itself.

6.6. The value of lexical items: extension, selection, suppletion

So far we have been considering cases in which value derives from an *extension* of signification, where the contextual meaning cannot be directly derived from the code, but needs to be supplemented in some way by a consideration of context. Establishing value may also be a matter of selection. The signification of a lexical item will often consist of a specification of more than one meaning, as, for example, in the well-worn example of the item *bachelor* (see 6.1). When the item occurs in context, one reading has to be selected as having the required value. One can, of course, argue, as is argued in Weinreich (1966), that what we have in the case of *bachelor*, as in the case of most words, is a set of lexical items which happen to have the same phonological and graphological shape. One is still faced with the need to select, however, as the ambiguity of the following locution makes clear:

(62) *Arthur was a bachelor.*

If (63) occurred as an utterance in context, this context would provide the necessary clues for selecting the appropriate value for *bachelor* and it would be clear whether the Arthur in question were an unmarried man, a young knight, or even a young fur seal without a mate during the breeding time. The value of word here depends on selecting the appropriate signification, or the appropriate lexical item, and as far as the process of interpretation is concerned, or in general the use of the resources of the code for communicative purposes, it does not matter which point of view one adopts. (63) may be compared with (59) above (6.5.2). Whereas the value of the word *bachelor* in (63) depends on selection, the value of this word in (59) depends on extension.

The process which is referred to in Lakoff (1967) as “reification” comes up for consideration here. Lakoff points out that the word *score*, for example, can

refer either to an aesthetic abstraction or to its physical embodiment. This distinction is illustrated by McCawley as follows:

(63) *John has memorized the score of the Ninth Symphony.*

(64) *The score of the Ninth Symphony is lying on the piano.*

Now one can argue that the dictionary entry for *score* has two readings: one containing the feature /+abstract/ and the other the feature /-abstract/ with appropriate distinguishers. This would presumably be the way it would be treated in Katz and Fodor (1963/1964). Alternatively one can take the line taken by Weinreich (1966) and say that there are two lexical items each graphologically represented as *score* but with distinct specifications. In both of these cases, the value of the word as it appears in (64) and (65) would depend on selection. On the other hand, one can argue that the meaning of *score* in (65) is predictable so that it does not need to be specified in the code at all. This is the line taken by McCawley:

... one may say that the existence of one set of lexical items implies the existence of a parallel set of lexical items ... and only the former lexical items need appear in the lexicon. (McCawley 1968: 132)

In this case, the value of the word as it appears in (65) would depend on extension.

Both Weinreich and McCawley, then, wish to account for what I have called value within a description of the code itself. Weinreich's proposal to specify distinct lexical items incorporates selection into the code, and McCawley's "lexical prediction rules", as he calls them, incorporate extension into the code. It seems to me that the disadvantage of both proposals is that they do not allow for the fact that the use of lexical items in discourse is a constantly creative process. Both assume, as they must, a stable pattern of relations, an *etat de langue*, but in discourse analysis we must think in terms of the *process* whereby the resources of the language code are put to communicative use. This point is dealt with in detail in Chapter 9.

Weinreich also implies that extension might be brought within the scope of grammar by postulating what he calls "construal rules" which have the effect of creating new lexical items by modifying semantic specifications. Such rules would have to account for the meaning of *did* in (60) and *Bibles* in (62) as innumerable other instances of meanings which derive from code/context inter-relations including, of course, all metaphor. McCawley points out that such rules are similar to his "lexical prediction rules" which would automatically derive *score* as a concrete entity from *score* as an aesthetic abstraction, *warm* as referring to temperature range from *warm* as referring to physical sensation and so on. But there are, he says, differences between these two kinds of rule:

... rules of this type (i.e. Weinreich's construal rules) which create lexical items that are all in some way "deviant" and whose use is restricted to highly specialized poetic ends, must be distinguished sharply from the rules creating the derived senses of *warm*, *dissertation*, and *John* (i.e. lexical predic-

tion rules), which give rise to lexical items that are no more 'deviant' than the items they are derived from. (McCawley 1968: 132)

Apart from invoking this vague notion of deviance, McCawley gives no precise reason why these "types of rule" should be "sharply distinguished", and no indication as to how such a distinction might be made. What he appears to believe is that his lexical prediction rules have to do with a linguistic process which is in some sense normal, whereas Weinreich's construal rules have to do with a linguistic process which is in some sense abnormal. But, as has already been pointed out (6.4.2), there is nothing rare or esoteric about the figurative or metaphorical use of language, though there may be something rare and esoteric about particular metaphors. Some grammarians, including McCawley, would have us believe that there is because they cannot conveniently account for metaphor in their grammars. But metaphorical uses of language are by no means "restricted to highly specialized poetic ends". They are essentially normal and commonplace, as is obvious from the most casual observation of actual behaviour and the most elementary knowledge of etymology. Metaphor is fundamental to human language and although grammarians might wish to regard it as of peripheral concern, being beyond the scope of their rules, a study of discourse, concerned as it must be with the communicative functioning of language, must recognize its central importance.

In view of the fact that the creation of new lexical items is a perfectly normal process, there seems no reason for making the sharp distinction between lexical prediction and construal rules that McCawley proposes. It seems preferable to regard both metaphor and reification as natural features of normal language use and to account for them in terms of the general process of establishing value by extension.

We have considered two ways in which value can be derived: selection and extension. There is a third way, for which I will use the term *suppletion*. This involves giving a lexical item a more precise specification by realizing a contextual synonymy between the item and other items in the discourse concerned. Let us look at an example:

- (65) *Very pure specimens of metals are produced by electrolysis. The process...*
 (66) *Atmospheric pressure is measured by a barometer. This instrument...*

In the language code, *process/electrolysis* and *barometer/instrument* stand in the sense relation superordinate term/hyponym (see Lyons 1963, 1968 Ch. 10). In these contexts, however, their relationship is one of synonymy and the superordinate term takes on the value of its hyponym. Once a reference is established in discourse, subsequent references are required simply to identify it, and the obvious way of doing this is to refer to the more general semantic features which are lexicalized in the form of a superordinate term. Interpretation takes place when the missing semantic features are restored by associating the identifying reference (to use the terms of Sampson mimeo) with the establishing reference.

Since suppletion involves this association between lexical items it can be considered as an aspect of textual cohesion (see 4.2.1). Like selection and extension,

therefore, it can be discussed in grammatical terms, and this is indeed how it is discussed in Hasan (1968). In her terms, *process* in (66) and *instrument* in (67) are “substitutes” for *electrolysis* and *barometer*. She mentions “a small set of nouns used for general reference” (Hasan 1968: 94) which commonly occur as substitutes, including such nouns as *thing object, animal, man* and so on. What has to be noticed, however, is that the substitute does not need to take the form of one of these general nouns: it needs only to be one which is superordinate to the one it relates to, and the number of nouns involved is of course a very large one. In fact any noun can be used as a substitute since an identifying reference in the form of a simple noun phrase will identify a referent previously established by means of the same noun in a complex noun phrase containing embedded material like preposed adjectives or relative clauses. To take an example, in the following:

(67) *A colourless and odourless gas is given off. The gas is nitrogen.*

the gas substitutes for the colourless and odourless gas.

In view of the fact that what Hasan calls substitution is a very general process which cannot be associated with any particular set of nouns it would seem preferable to consider it in terms of the communicative function of discourse rather than in terms of the formal patterning of text, using the distinction drawn in Chapter 4 (4.1.3). From this point of view, the phenomenon formally described as substitution is seen as one way of deriving value from signification and allows us to regard suppletion together with selection and extension as having to do with the same basic process of establishing value by correlating code and context.

So far we have been considering suppletion of a rather simple kind which involves discovering a hyponymic expression in the context which will serve as the value for the superordinate term serving as identifying reference. Frequently, however, suppletion is a somewhat more complex operation. Consider the following, for example:

(68) *The majority of alloys are prepared by mixing metals in the molten state; then the mixture is poured into metal or sand moulds and allowed to solidify. Generally the major ingredient is melted first; then the others are added to it and should completely dissolve.*

Here the value of *mixture* is derived by reference not to a preceding noun to which it stands in some sort of sense relation but by reference to the embedded sentence *by mixing metals in the molten state*. This provides it with the value “the mixture of metals”. The value of *ingredient* derives from recognizing the syntagmatic sense relation between this term and the term *mixture* which might be written out as something like:

(69) *A mixture contains ingredients.*

Since *mixture* has the value “mixture of metals” *ingredient* takes on the value of “metal”. In other words the context sets up a synonymous relationship between the terms *metal* and *ingredient* although these terms are not semantically related in the code at all. The synonymy is a feature of the value of these terms in this

context but not of their signification as code elements, and this feature is realized by suppletion.

Deriving the value of an item by suppletion then may not simply be a matter of finding a foregoing expression whose signification stands in some direct sense relation to the signification of the item concerned. Values derive from other values as the discourse proceeds. Another illustration of this comes from a consideration of nominal compounds. As is pointed out in Lees (1963), a nominal of the following kind:

(70) *Fuel gas*

can be represented as deriving from an underlying structure of something like the following sort:

(71) *Gas which is used as fuel.*

In so far as (72) makes explicit the syntactic relations holding between the two elements of the compound it can be said to represent the signification of (71). The value of (71), however, must by definition depend on context and the context may not provide an expression which will match (72). Consider the following:

(72) *The engineer uses gases which burn at a high temperature for cutting metals. The best known of the fuel gases are acetylene, hydrogen and propane.*

Here the value of *fuel gases* is derived by suppletion from the expression “gases which burn at a high temperature” which cannot be related in any direct way with the signification of the nominal as represented by (72).

What I have tried to do in this chapter is define the notion of value and to demonstrate how it can be applied in discourse analysis, and I have tried also to distinguish three ways in which it is realized in respect of individual lexical items. In Chapter 10 I shall suggest how the notions of selection, extension and suppletion can be put to pedagogic use. Meanwhile in the next chapter I want to consider how the notion of value can be relevant to discourse analysis in a more general way by applying it to units of language other than the lexical item and the grammatical category.

CHAPTER 7

ILLOCUTIONARY ACTS IN DISCOURSE

7.1. The rhetorical value of locutions

The discussion in the previous two chapters has sought to show that it is preferable for the applied purposes we have in mind to remove discourse analysis from the sphere of grammar and to consider it as a rhetorical operation involving the study of the value that linguistic elements assume when they are used in acts of communication. We may now refer back to Chapter 4.4 and say that the association of particular speech functions with particular utterances, or the recognition of what a particular utterance counts as a speech act, is a matter of realizing the communicative value of the utterance concerned. But at this point a difficulty emerges. One may say that the value of an utterance can be accounted for in terms of the conditions which have to be met for the communicative act in question to be performed. But such conditions are represented as situational correlates external to the utterance itself, whereas in our discussion so far value has been described in terms of the internal relationships which are set up between linguistic elements in an utterance. There seems to be some inconsistency here. On the one hand, value appears to be imposed from outside, whereas on the other hand it appears to develop from within the utterance itself.

As a first step to resolving this apparent inconsistency we must notice that the notion of illocutionary act has generally been discussed in relation to locutions, in the sense defined in the previous chapter. Thus we find the communicative acts that people perform described in terms of the use they make of sentences. There are of course good methodological reasons for making the simplifying assumption that communication is brought about by the use of locutions, but it is important to recognize that locutions are grammatical and not rhetorical units. A locution is the representation of an utterance only in so far as the utterance can be put into correspondence with a sentence as an exemplification of grammatical rules. But as the diagrams in the previous chapter show (6.3), utterances do not have to be isomorphic with locutions. The latter are simply the embodiment of abstract entities. As Lyons puts it:

The sentence is the maximum unit of grammatical analysis: that is, it is the largest unit that the linguist recognizes in order to account for the distributional relations of selection and exclusion that are found to hold in the language he is describing.
(Lyons 1968: 176)

But there is no reason for supposing therefore that the locution as a potential utterance corresponding to a sentence is the maximum unit of rhetorical analysis. To suppose that is to fall into the error which was discussed previously of assuming that discourse phenomena must of necessity be brought within the scope of grammatical statement. Lyons goes on to make a remark which does in fact seem to suggest just such a confusion of grammatical and rhetorical criteria:

As a grammatical unit, the sentence is an abstract entity in terms of which the linguist accounts for the distributional relations holding within utterances.
(Lyons 1968: 176)

This implies that all utterances are locutions in our sense. But I would wish to say that utterances, deriving as they do independently from the rules of the code, may consist of stretches of discourse within which several locutions may be distinguished, so that there will be relations holding within utterances which cannot possibly be exemplified by sentences. In other words, it is clear that in discourse utterances which have the form of locutions enter into relations with other utterances of this form to make up composite units of communication. Thus locutions can be regarded as linguistic elements in the same way as can lexical items, and as such they may take on different values in the same way by association with other locutions in the larger stretch of discourse of which they are in effect constituents. Let us consider an example.

7.1.1. *Establishing value: predictions*

The modal verb *will* takes on a range of different values depending on the other linguistic elements it is associated with. Palmer (1965) refers to these as the “uses” of *will* and distinguishes six of them, when the modal is associated with the present tense. Thus, for example, when it is associated with a future time adverbial it takes on the value of reference to future activity. In the following, for instance:

(1) *He will come round tomorrow.*

the present tense combined with the modal *will* combined with the adverbial *tomorrow* have the effect of giving this utterance the value of a statement about future activity. If there is a different combination of elements, however, each takes on a different value and the result is a different kind of statement. Thus the following may also count as a statement about future activity:

(2) *He is coming round tomorrow.*

Here the adverbial associates with the present tense and the progressive aspect to give the latter a different value from that which they have in, for example, the following:

(3) *He is coming round.*

One might characterize the difference between (1) and (2) by saying that an utterance of (1) serves as a prediction whereas an utterance of (2) has no such predictive force but is simply a statement of what the speaker believes to be a fact. This is the distinction made in Boyd and Thorne (1969). McIntosh (1966a) points out, however, that the difference between predictive and non-predictive statements is more complex than this:

The making of purely predictive statements seems to be somewhat complicated, in everyday circumstances, by the fact that most of the available constructions have some other, often more primary function which makes them unambiguously usable for prediction in certain cases only.

(McIntosh 1966a: 304)

He points out that it is perfectly possible to have predictive statements in which the verb takes the form of the present progressive and non-predictive statements

where the modal *will* is associated with the present and a time adverbial. He gives the following examples:

- (4) *I'm going to leave tomorrow night. non predictive*
- (5) *I'll leave tomorrow night. non-predictive*
- (6) *I'm going to collapse before long. predictive*
- (7) *I'll collapse before long. predictive*

It would appear then that it is not simply the combination of the present, the modal *will* and a time adverbial which results in a predictive statement. One might imagine, in comparing (4)/(5) with (6)/(7) that it might have something to do with the choice of the time adverbial, but this does not seem to be the case either since the following:

- (8) *I'm going to have a hangover tomorrow morning.*

would be taken as having predictive force. McIntosh suggests that the choice of person has some effect on the predictive force of the utterance, with the third person tending to occur in statements which are more predictive than those in which the second person occurs. Thus of the following, (9) seems to make a stronger prediction than (10), with (11) hardly having predictive force at all:

- (9) *He'll leave her within a year.*
- (10) *You'll leave her within a year.*
- (11) *I'll leave her within a year.*

But again we have the evidence of (7) to suggest that the first person can combine with other linguistic elements to create a predictive statement. And if we change (11) to read:

- (12) *I'll leave her before long.*

the distinction remains. Thus the distinction must be carried by the lexical items *collapse* and *leave* and has to be glossed by saying that (11) and (12) are non-predictive because one cannot sensibly predict something which it is within one's own volition to control.

7.1.2. *The linguistic realization of contextual conditions*

What this discussion seems to make clear is that it is impossible to establish the rhetorical value of an utterance by reference to the occurrence of certain linguistic elements but that this value is a function of the relationships between the different elements, which of course themselves assume different values accordingly. It was precisely because of this mutual modification that linguistic elements undergo that we were led to reject the attempts to incorporate communicative function within the signification of linguistic elements.

Austin, working at a more general level than McIntosh, also attempts to discover the grammatical features which distinguish performative utterances. Having failed to find "any *single simple* criterion of grammar or vocabulary" he suggests:

But maybe it is not impossible to produce a complex criterion, or at least a set of criteria, simple or complex, involving both grammar and vocabulary.

(Austin 1962: 59)

But twenty pages later, having passed under review a number of possibilities like mood, the use of adverbials and the use of what he calls “connecting particles” (like *therefore*, *whereas*, *hereby*) he has to admit the elusiveness of any precise criteria.

No doubt a combination of some or all the devices mentioned above (and very likely there are others) will usually, if not in the end, suffice. Thus when we say ‘I shall’ we can make it clear that we are forecasting by adding the adverbs ‘undoubtedly’ or ‘probably’, that we are expressing an intention by adding the adverbs ‘certainly’ or ‘definitely’, or that we are promising by adding the adverbial phrase ‘without fail’, or saying ‘I shall do my best to’.

(Austin 1962: 77)

It is interesting that McIntosh comes to very much the same conclusion. His is an extremely detailed examination of the one illocutionary act of predicting which yields a good deal of interesting information about presupposition but nothing in the way of a precise set of devices for signalling prediction. He points out (as does Austin) that in spoken language there are “intonational means” of clarifying communicative intentions (Austin speaks of “tone of voice, cadence, emphasis”) but that in written language we must “resort to alternative (co-textual) devices” (McIntosh 1966a: 318). The examples he gives of such “co-textual devices” are similar to those cited in Austin. Thus, for example, the following, in isolation, is ambiguous:

(13) *I’m going to see him tomorrow.*

It could count as a predictive statement like:

(14) *I’m going to be sick.*

or as a non-predictive statement like:

(15) *My daughter is going to sing to you.*

assuming the most likely interpretations of these two utterances. The ambiguity can be removed, however, by the simple expedient of adding a co-textual device as follows:

(16) *I’m going to meet him tomorrow, I feel it in my bones.*

This then becomes an unambiguously predictive statement. Or one can add a different device to convert (13) into an unambiguously non-predictive statement:

(17) *I’m going to meet him tomorrow, it’s arranged.*

McIntosh refers to these additions as “concomitants which override an otherwise different interpretation” (McIntosh 1966a: 311) and notes that they are numerous and in need of investigation. But what exactly are these “concomitants”? They are surely no different in fact from all the other linguistic elements we have been discussing which also “override an otherwise different interpreta-

tion". Their effect is to alter the value of the utterance and also of course the value of all the other linguistic elements it is associated with. But the added elements in (16) and (17) are themselves locutions. It is true that they are graphologically brought within the same "sentence" but this is irrelevant since they would have the same modifying force if they took the form:

- (18) *I'm going to meet him tomorrow. I feel it in my bones.*
 (19) *I'm going to meet him tomorrow. It's arranged.*

It would appear from this, then, that it is not possible to establish the value of an utterance in terms of the constituent linguistic elements within the locution to which it corresponds but that we must allow for locutions themselves to take on different values in relation to other locutions which together constitute a larger unit of utterance. Thus I would argue that the first locution in (16)(17)(18) and (19) stands in the same kind of rhetorical relationship to the second in these utterances as the main clauses in the following stand in relation to their complements:

- (20) *I promise to come.*
 (21) *They promise to come.*

The fact that locutions derive communicative value by contracting relations with other locutions in discourse explains of course why ambiguity as a rhetorical phenomenon occurs so rarely. It is in fact essentially a grammatical phenomenon which only comes to light when locutions are considered in isolation by linguists or by subjects of psycholinguistic experiments. Thorne (1966) expresses puzzlement as to why it should be that ambiguous sentences are not immediately understood as such when they occur in discourse. The answer is that sentences, that is to say in our terms locutions, do not occur in isolation but as elements in units of discourse and other elements provide them with the appropriate value. It makes no more sense to ask why a sentence like:

- (22) *Flying planes can be dangerous.*

should not cause difficulties than to ask why the lexical item *bank* should not cause difficulties in utterances like:

- (23) *I keep my money in the bank.*

It is just as unreasonable to suppose that an interpretation of (22) involves weighing up the possibilities of "Planes which fly" as opposed to "To fly planes" as to suppose that an interpretation of (23) involves weighing up the possibilities of (Midland) *bank* as opposed to (river) *bank*. The two senses of the linguistic element no more underlie (22) than they do (23) if these are considered as utterances. Thorne, in confusing the distinction between sentence and utterance creates a problem which does not in fact exist:

Consider an ambiguous utterance: *I dislike playing cards*, for example. Encouraged to take it as an example of an ambiguous utterance (which means, in particular, not being given any context for it), you will hear it first as one sentence, then as another – suddenly. Did you interpret it one way and then

in another? Did you decide to interpret it one way and then the other?
 Could you choose which way you interpreted it first? (Thorne 1966: 5)

These questions are I believe meaningless. If the expression he mentions is deprived of a context it ceases to be an utterance and becomes a locution, and as an utterance the expression would in all likelihood not be ambiguous at all, quite apart from the fact that, as Morton points out in his discussion of Thorne's paper, the ambiguity is resolved phonologically in speech (Lyons and Wales 1966: 15-16).

But although the ambiguity of the form illustrated in (22) and in "I dislike playing cards" might be said to be less likely in speech because of the availability of dis-ambiguating phonological devices, other forms of misunderstanding are in fact more likely to occur in speech than in writing. This is because it is of the nature of written discourse to be independent of an immediate situation and in consequence to compensate for the absence of feedback and other situational support by a greater degree of explicitness. This points to the importance of regarding speech and writing not merely as different media but also as different modes of social behaviour (see Widdowson 1972b). Briefly we may say that in written discourse the situational concomitants of speech tend, as far as possible, to be incorporated into the context of discourse itself – or, to use the Hallidaian term favoured by McIntosh, into the co-text.

What this means is that the conditions attendant on the performance of different communicative acts normally find expression in the linguistic context and not in the features of the extra-linguistic situation in which the act of speech takes place. The conditions may also be satisfied linguistically in spoken discourse of course so that here too the value of utterances may develop within the discourse itself. It would appear then that there is in fact no inconsistency in saying that the value of an utterance derives from the satisfying of certain conditions and is also a function of the inter-relationship of linguistic elements. It happens that in speech such conditions may be met by features of the extra-linguistic situation. But in written discourse, which is what we are concerned with here, they are given linguistic expression. To put the matter simply, in speech it may happen that to understand the communicative import of an utterance one has to recognize how it relates to the setting, the role and status of the interlocutors and so on. In reading, to understand the communicative import of an utterance one has to relate it internally to the rest of the discourse. We are never called upon to interpret a phonetically realized locution in isolation from a situation nor a graphetically realized locution in isolation from a co-text. It is of interest to the linguist and the philosopher to consider locutions in isolation, but they have no independent status in actual communication.

What the analysis of written discourse involves, then, is the discovery of how linguistic elements, including locutions, inter-relate to yield the value of the utterances of which they are constituents. Since it is common to think of utterances as short stretches of speech corresponding to locutions, it would perhaps be better to refer to these larger units of written discourse by another name, so I will refer to them as *illocutions*. Thus definitions, explanations, descriptions, reports and so on are illocutions, which may derive their value from the inter-relationship be-

tween linguistic elements within one locution or from the inter-relationship between a number of locutions. In simple terms, an explanation may take up only one sentence or it may extend over several. Let us consider an example.

7.2. The illocutionary act of explanation

For a locution, or a sequence of locutions, to count as an explanation it must meet the condition that its use refers to two events or states of affairs, one of which is represented as accounting for the other. In Dakin (1970) this condition is expressed in the formula:

(24) *X explains Y*

where, in his terms, X and Y represent sentences which may or may not be in nominalized form. Dakin gives the following examples:

(25) *John's brakes jammed. This caused him to stop.*

(26) *The jamming of his brakes caused John to stop.*

(27) *Because his brakes jammed, John stopped.*

(28) *John stopped because his brakes had jammed.*

All of these are presented as meeting the required condition: the event of John's stopping is accounted for by the event of the brakes' jamming. We must notice, however, that the explanation is achieved by means of one locution in (26)-(28) but by means of two in (25), the first of which only takes on the value it does as a part of the explanation by virtue of its association with the second. Furthermore, the two events do not need to be provided with an explicit causative link for them to be understood as being causatively related. Consider the following:

(29) *John's brakes jammed. He stopped.*

Dakin comments:

The order of sentences reflects the order of events, but the first event is no explanation of the second unless I intend you to understand that the two events are related causally. (Dakin 1970: 199)

This is very true, but the intention does not have to be formally indicated by an explicit expression of causation. The order of events will often provide explanation enough. This is even clearer when one considers an example like the following:

(30) *Agatha hit John a resounding blow with the rolling-pin. He fell to the ground.*

It would surely be perverse to say that John's falling to the ground is not causally related to Agatha's striking him on the head. Thus, if (25)-(28) are explanations, then so are (29) and (30). Dakin's comment quoted above suggests that for him an explanation must be expressed by means of certain formal devices, and indeed he acknowledges that his paper is concerned

with a search for formal properties that distinguish explanations from other kinds of utterance such as simple statements. (Dakin 1970: 199)

The search for formal properties naturally inclines him to define explanation within the limits of a single locution in which linguistic features signal the illocutionary force. We are face to face here with the same difficulties as were discussed in Chapter 5 (5.4). Let us consider them again in relation to the illocution of explanation and see how they lend indirect support to the proposals that are being presented in this chapter.

Dakin says that (25)-(28) are “equivalent” to the formula (24), as are the following:

(31) *John’s brakes jammed so he had to stop.*

(32) *John’s brakes jammed. He had to stop.*

This commits him to the claim that all of these sentences would be equivalent to sentences of the form:

(33) *The jamming of his brakes explains John’s stopping.*

(34) *The fact that his brakes jammed explains why John stopped.*

The question now arises: equivalent in what sense? One might argue that all of these sentences share the same signification at some deep level of semantic representation, but it is not true that they share the same value as illocutions. And yet it is the common illocutionary properties that we wish to establish. One can see the differences between these examples as illocutions by considering the likely circumstances of their use. Thus if asked for an explanation as to why John stopped, one could make use of (28) but the use of (33) or (34) would make for a very curious piece of dialogue:

(35) *A: Why did John stop?*

B: The fact that his brakes jammed explains John’s stopping.

What would be implied, or presupposed, by B’s utterance here is that the explanation is already available and that he is simply repeating it. (35) makes for an odd piece of discourse anyway. A more likely context for (33) or (34) would be something like the following:

(36) *The fact that his brakes jammed explains John’s stopping. I agree. But it does not explain why he stayed in the car.*

or:

(37) *Let us review the facts of the case. The jamming of his brakes explains the fact that John stopped. The snowstorm explains why he remained in his car for two hours.*

Now these can hardly be counted as explanations. Rather they are statements about explanations. Dakin points out that the following:

(38) *John explains Mary’s behaviour*

is not an explanation but simply a report that an explanation is being offered. In the same way one can say that in (36) and (37) what we in fact have is a report that an explanation has already been offered. What (37) and (38) show is that al-

though there may be reasons for wishing to represent the basic signification of the other sentences as (33) and (34), they clearly do not share the same value. If they are explanations in some contexts, they are obviously not explanations in all: the locutions which they are associated with in (37) and (38), for example, gives them the value of reports, or recapitulations. Once again we see how linguistic elements which in isolation might appear to have some absolute value are conditioned by the relations they contract with other locutions in actual discourse.

7.2.1. *The realization of explanation in discourse*

Let us now consider the circumstances under which (33) and (34) might be counted as explanations and then proceed to establish how they differ from the other locutions we have been considering. One might devise a context such as the following:

- (39) A: *It appears that John's brakes had jammed.*
 B: *So what?*
 A: *Don't you see? The fact that his brakes jammed explains John's stopping.*
 B: *So he wasn't intending to meet Agatha after all.*

Here a locution taking the form of (33) and (34) counts as an explanation because B has to be told the significance of the event described by A. B's question provides for a further condition which must be met before a locution counts as an explanation, which is that the addressee does not already know that of the two events one accounts for the other. One of the conditions attendant upon an explanation is quite simply that some explanation is called for, and this condition is fulfilled within (39) by B's question, without which the locution of the form (33) or (34) does not take on the value of an explanation. The difference between (39) and (36) and (37) is that this condition is met in the former but not in the latter.

We must notice that in (39) B is in possession of the facts expressed about the two events: it is the *connection between them* that is not obvious to him. This suggests a way of distinguishing between (33)-(34) and (28). A's question in (35):

- (40) *Why did John stop?*

makes it clear that A knows that John stopped and that there is some explanation for his stopping. Unlike B in (39) he is asking for information about an event he does not already know about. Whereas the situation of A in asking a question in the form of (40) can be expressed by the following formula:

$$\text{Formula I:} \quad E_1 \text{ ————— } \begin{matrix} \text{why} \\ ? \end{matrix}$$

the situation of B in (39) can be expressed by the following:



We can now perhaps begin to see why the other “equivalent” locutions cannot serve as explanations in response to a question like (40). We have seen that (33) and (34) take on the value of explanation when a formula II situation obtains. What situation is required then for (31) and (32) to count as explanations? We must notice that we are assuming that the modal element in these instances is not given contrastive stress. If it is, then the locutions can be used as explanatory statements in a formula I situation. If it is not, they cannot. Thus the following do not cohere:

- (41) A: *Why did John stop?*
 B: *John’s brakes jammed so he had to stop. (cf.: John’s brakes jammed so he had to stop.)*
- (42) A: *Why did John stop?*
 B: *John’s brakes jammed. He had to stop. (cf.: John’s brakes jammed. He had to stop.)*

We can explain the lack of coherence here by reference to Halliday’s given/new distinction (Halliday 1967-68). In simple terms we can say that in (41) and (42) B presents the information about John’s stopping as if it were new whereas the question that A puts makes it clear that it is given. The contrastive stress, of course, has the effect of making the modal itself the new element, which is why the parenthesized locutions in the examples above can serve as appropriate replies to A’s question.

But now if an explanation represents one event as accounting for another, it is presumably the event which does the accounting rather than the event which is accounted for that has to be presented as new. Put another way, we do not ask for an explanation unless we know something which needs to be explained. The difficulty with B’s reply in (41) and (42) is that it represents what needs to be known as already given and what is already known as new, whereas to serve as an explanation it needs to do the reverse, as is clear from the fact that a response in the form of (28) would be perfectly appropriate. Thus (31) and (32) do not take on the value of explanations in (41) and (42) because they do not meet the condition which is given expression in the locution shown in (40): the two locutions in (41) and (42) do not inter-relate to yield the required value.

What situation is required then for those locutions to take on explanatory value? We can easily include them in a piece of discourse which *is* coherent by altering the question to which they serve as a response. The most likely question in fact is ‘What happened?’:

- (43) *A: What happened?*
B: John's brakes jammed so he had to stop.

But notice that A's question does not actually require B to link the two events in the way they are: an explanation is not called for because A does not necessarily know what is to be explained. One might represent the situation in (43) as follows:

| | | | | | |
|-------------|----------------|----------------|----------------|----------------|------|
| | what happened | | | | |
| Formula II: | ? | ? | ? | ? | |
| | E ₁ | E ₂ | E ₃ | E ₄ | etc. |

A is not asking how a certain event can account for another: he is asking what event or events took place. His question as such therefore cannot be said to represent the condition whereby B's reply takes on the value of an explanation. But of course one can provide such a condition by extending the context. For example:

- (44) *A: Did John catch the thief?*
B: No.
A: What happened?
B: John's brakes jammed so he had to stop.

What we have to notice here, however, is that the explanation relates to the escape of the thief and not to the stopping of the car. A's question is equivalent in value to something like:

- (45) *Why didn't he catch the thief?*

What he is asking for is information about another event which will account for an event he already knows about. Hence (44) conforms to Formula I. But then the fact that B's remark has the formal appearance of an explanation is irrelevant since the whole locution is being used to refer to what accounts for the known event, and so is equivalent in value to locutions like:

- (46) *John's brakes jammed.*

or

- (47) *John's brakes jammed and he had to stop.*

or, more explicitly:

- (48) *Because John's brakes jammed.*
 (49) *He escaped because John's brakes jammed and he had to stop.*

and so on.

What seems to emerge from this rather long and involved discussion is that although there may be reasons for postulating a common signification for the locution which Dakin cites, only one – (25) – fulfils independently the conditions which are necessary for a locution to meet before it can count as an explanation. This is because a known antecedent event is represented as given and a second event which accounts for it is represented as new. The other locutions have to

have this condition provided by the context or co-text and they only take on the value of explanations when they inter-relate with other locutions in the discourse. They have no independent explanatory value. To say that (25)-(28) and (31)-(34) are all explanations is similar to saying that the modal *will* is always predictive. In fact, as we have seen, these linguistic elements only take on these illocutionary values when they combine with others.

We have seen that an explanation is an illocution that commonly requires the combination of two locutions or more. The reason for this has to do with the conditions which have to be met for an explanation to be produced. It is a condition on an explanation not only that two events or states of affairs should be shown to be related in such a way that one of them accounts for the other, but also that the event which is to be accounted for is in some sense known or given. This second condition finds expression in the preceding discourse. This explains why although (25) meets these conditions in that the event to be accounted for is represented as given, the following would be preferred versions in actual discourse:

- (50) *Because his brakes jammed.*
 (51) *He stopped because his brakes jammed.*

The difference between *since* and *because* constructions comes up for consideration here. Although Dakin does not mention the former as being members of his “equivalent” set of sentences, it is clear that the following:

- (52) *Since his brakes jammed, John stopped.*
 (53) *John stopped since his brakes jammed.*

do conform to the “X explains Y” formula. They meet the condition that the event of John’s stopping is shown as being accounted for by the event of his brakes jamming. What prevents (52) from being an explanation however, is that it is the accounting event which is represented as given or known. In this respect it is similar to (27). It is interesting to note, however, that of the four locutions (28)/(52) and (27)/(53) the first pair seem more “normal” than the second, and one might surmise that the latter are of fairly rare occurrence. (One might even consider marking them with a ?.) It is tempting to suggest that there are general conditions on the use of *since* and *because* such that the former is used when the accounting event is known and the latter when the event to be accounted for is known. This would explain why *since* constructions cannot occur independently whereas *because* constructions can. Here we can use the stigmatizing mark without hesitation:

- (54) A: *Why did John stop?*
 B: *Since his brakes jammed.*

The oddity of B’s answer in (54) comes about because it implies that A already knows about the event he is asking about. The oddity of (27) and (53) comes about because there is a contradiction between what the use of *since* and *because* implies and what is implied by the positions they have in the locutions concerned.

To return now to (50) and (51), which I said could be considered as preferred versions of (25) in the context provided by (40). They would be preferred because they avoid the redundancy of restating facts which are already known. But by the same token the very formal indicator of explanation, *because*, is also redundant. Thus the following exchange is perfectly normal and leaves no room for misunderstanding:

- (55) A: *Why did John stop?*
 B: *His brakes jammed.*

Not only is it the case that the formal properties of a locution do not ensure a particular rhetorical value, but they appear also to be redundant in those contexts where foregoing locutions provide for the required conditions, as in (55). Consider the following:

- (56) a) *The fact that when a temperature drops below the ignition temperature the flame goes out explains why it is that putting a bucket of water on a fire will extinguish it.* b) *The water takes heat from the fire to raise its temperature and convert itself into steam.* c) *The fire loses heat and its temperature drops to below the ignition point.* d) *The flame dies.*

Here it is not a) that is the explanation in spite of the fact that it corresponds to the Dakin formula. The explanation consists of the combination of locutions b), c) and d) and this combination takes on explanatory value by virtue of its association with a). Although this can be made more explicit by adding an expression like "This is because" at the beginning of b), this expression is not a necessary condition on the locutions counting as an explanation. Even if a) were to take a different form in which no indicator like *explains* occurred, it could still serve as the required condition.

a) could read:

- (57) *Whenever a temperature drops below the ignition temperature the flame goes out. This is the theory behind putting a bucket of water on a fire to extinguish it.*

It is the business of discourse analysis to discover how a sequence of locutions such as is shown in (56) combine to create rhetorical value, to discover what illocution they represent. To summarize, in discourse analysis we are concerned with the values which linguistic elements assume and this involves recognizing how they inter-relate in the fulfilling of the conditions necessary for particular illocutions to be performed. Thus, as we have seen, the linguistic element *will* in combination with certain other elements satisfies the necessary conditions for the locution of which it forms a part to count as a prediction, whereas these conditions are not met by a different combination, in which the element *will* of course takes on a different value. Similarly we have seen that the linguistic element *His brakes jammed*, or a sequence of elements like b), c) and d) in (56) in association with others, like *Why did John stop?* or a) in (56), or (57), satisfies the necessary conditions for the locution to count as an explanation. Since in written discourse the conditions necessary for the illocutions to be recognized are incorporated into

the co-text, our task is to establish sets of conditions for different illocutions and then to consider alternative ways in which these conditions are realized in the discourse.

7.2.2. *The characterization of explanation and other illocutions*

At this point we run up against a major difficulty. As we have seen, it is possible to postulate three different sets of conditions under which the locutions mentioned by Dakin can be appropriately uttered. We have made the tacit assumption that it is the set represented by Formula I which is relevant to giving an explanation. But it can be claimed that all three represent different conditions for different kinds of explanation. If we cannot rely on formal evidence in the characterization of illocutions, how can we characterize them? What are the grounds for saying that Formula I represents the essential conditions for an explanation whereas Formula III, for example, does not? The answer to this question is that we define the term explanation with reference to Formula I and we do not attempt to bring all illocutions which might be referred to as explanations within the scope of one formula. If it is accepted that each formula indeed represents a different illocution, and if it is accepted that Formula I does represent what people in general would regard as an explanation, it would seem to be reasonable to restrict the term explanation to those illocutions which require the set of conditions in Formula I, and to devise other terms to cover the other cases when necessary.

In Searle (1969) we find a similar restriction in relation to his treatment of promises:

in the analysis, I confine my discussion to full blown explicit promises and ignore promises made by elliptical turns of phrase, hints, metaphors, etc. I also ignore promises made in the course of uttering sentences which contain elements irrelevant to the making of the promise. (Searle 1969: 56)

Like Dakin, Searle is concerned with the illocution which is formally marked as such and is performed by the use of a single locution. Since we have argued the need to consider what Searle decides to ignore we cannot of course adopt the same idealization. Our idealization takes the form of singling out one illocution which would generally be referred to as an explanation and then setting up conditions to account for it, allowing any locution which meets these conditions explanatory status, whether elliptical or not, whether or not they “contain elements irrelevant to” the giving of an explanation, whatever Searle may mean by this.

This procedure allows us then to set up conditions for illocutions in general. That is to say we invent terms for distinctions which are not reflected in the way people refer to the illocutions in question. What in effect we say is that whenever a locution meets the stipulated conditions it takes on the value of an explanation and if it does not it is not an explanation, even if people call it such. There is an alternative procedure. We could set up conditions to account for what a particular group of people say is an explanation. In other words, instead of selecting one illocution among several as being in some sense the basic one, we could try to find out which illocution is considered to be an explanation in a particular area of discourse. Thus instead of maintaining a high degree of idealization by fixing arbi-

trarily on one illocution as being the most basic, we may relax our idealization and focus attention on a particular type of discourse. Instead of asking the question: what is the most elemental kind of explanation in general? we might ask: what counts as an explanation in an elementary science textbook, for example, or in a manual of instructions?

What is being suggested here is that the approach taken in Lehrer (1969), which was referred to in the previous chapter (6.5.3), should be extended to apply to the use of linguistic elements larger than the lexical item. As we have noted, Lehrer demonstrates the specific values which certain lexical items assume in culinary discourse. What in effect the writer on culinary matters does is to devise a special mode of communication to convey his particular message, and he does this by adapting the code resources to his own purpose. The same is true of literary writing where the writer gives new values to linguistic elements in order to capture a kind of reality which is beyond the scope of other modes of communication (see 6.5.2). The difference between a recipe and a poem is that once the conventions for recipe-writing are established other recipes can be produced by conforming to them, whereas poems do not conform to conventional formulae in this way. The difference between a recipe and other sets of instructions lies in the fact that the instructions in a recipe have to incorporate the kinds of lexical distinctions between *cook/bake/poach/braise/roast* and so on that Lehrer talks about. If they do not then they do not meet the conditions necessary for the satisfactory production of a recipe. They are instructions but instructions with a difference in that they conform to the conventions associated with this particular field of discourse.

The principle we wish to establish then is that there are conventionalized conditions on different illocutions in particular areas of discourse which are realized by the way linguistic elements are related to each other. To take another example, one can, as Searle does, set out the general conditions for what he calls "full blown explicit promises", but a legally binding promise, as would occur in a promissory note or a formal agreement has to be made in a certain way before it will count as such. There are conditions, realized as what the layman might regard as an unnecessarily elaborate use of language, which must be met if what is written is to count as a promise by legal convention. One can make the same point with reference to other locutions. There is a difference, for example, between a confession as a private action between, let us say, a husband and wife, and what would be understood as a confession by a Catholic priest. Both are confessions in that they conform to certain common conditions: the speaker refers to his own past actions and these actions are ones which he believes his listener will consider reprehensible, and so on. But there are further conditions which must be met for a religious confession to be made. For instance, one cannot confess to the verger and expect absolution.

There are then two ways in which one can approach the characterization of illocutions. The first is that taken in the kind of speech analysis carried out by Searle. This operates at a level of idealization which yields general conditions for a kind of "standard" illocutionary type: idealized promises, confessions, explana-

tions and so on which take the form of single locutions. The second relaxes this idealization in two ways: firstly, it accepts that illocutions may be specific to particular areas of use in that what constitutes a promise or an explanation in one kind of discourse may not do so in another. Secondly, it accepts that illocutions cannot be set into correspondence with single locutions but may extend over several, each taking on a value as it represents a condition on the felicity of the illocution as a whole. The first relaxation of idealization amounts to destandardization and the second to contextualization.

7.2.3. *Scientific explanation*

Our discussion of explanations has attempted to point out the importance of recognizing context, and of seeing that illocutionary value cannot easily be contained within the locution itself, but may be a function of the relationship between more than one locution. Having taken the contextualizing step, I wish now to take the destandardizing step and consider what kinds of illocution might be said to constitute scientific discourse as a mode of communication. This will be a similar kind of enterprise to that in Lehrer (1969) except that I shall be concerned not with how lexical items relate to each other to form a particular mode of communication but with the relationships between larger linguistic elements and the illocutionary values which these relationships create.

Let us begin by considering explanations again. So far we have been taking the speech act analysis line by setting up a formula to account for what appears to be the most common or elemental type of explanation. This is one in which one event or state of affairs is represented as accounting for another, and in which that which is to be accounted for is in some sense known. Now in scientific writing explanations very often do not conform to this formula. In a sense the whole field of science is one vast explanation in that it attempts to relate familiar phenomena to unfamiliar general laws. Thus it is concerned not so much with accounting for one particular event or state of affairs by reference to another as with accounting for an event or state of affairs as a particular instance of a general rule. Consider the case of John and his defective brakes. We will change the situation slightly and suppose that John's brakes failed and his steering failed at the same time just as he was approaching a sharp bend at speed. Following Formula I, we might provide an explanation of the ensuing crash in something like the following way:

(58) *He crashed because his brakes and steering failed.*

This is a perfectly acceptable explanation but it is not the kind of explanation which would satisfy someone who was looking for a scientific account of what took place. If one thinks of the event as an instance of some general physical law, then one might come up with an explanation of something like the following kind:

(59) *He crashed because every body remains in a state of uniform motion in a straight line unless acted upon by forces from outside.*

This of course is a highly unlikely kind of utterance: it has a most curious ring to it. But what is the reason for its oddity? I would suggest that its oddity lies in the fact that in providing a scientific explanation the event to be accounted for is represented not as an actual happening but as an *instance* of the operation of the law being referred to. The question presupposed by the first part of (59) and by (58) is something like:

(60) *Why did he crash?*

and this suggests a kind of discourse where what would be appropriate would be a Formula I type explanation which treated the event as an event and not as an instance. But we can be more precise than this. (58) in accounting for the one event by the other reports that the events actually took place. It differs as an illocution from:

(61) *He will crash because his brakes and steering will fail.*

(58) might be characterized as an explanation coupled with a report and (61) as an explanation coupled with a prediction. It is true that the latter makes for a somewhat peculiar utterance in this case and calls up a fictional situation in which the speaker has been tampering with the car in question. But it is easy to cite more ordinary examples of an explanation/prediction. For example:

(62) *He will come home because he will be short of money.*

We can also have explanations which couple with general statements, as in the following:

(63) *He crashes because his brakes and steering fail.*

Again we should not be put off by the vision this conjures up of a maniac driver persisting in driving a defective car in spite of a series of accidents. There are plenty of other locutions we could cite to illustrate how an explanation can couple with a general statement. For example:

(64) *She falls ill because she worries so much.*

Now the point about all three of these illocutions is that they refer to actual events which are placed in time. (58) represents the event as having taken place in the past, (61) and (62) represents it as likely to happen in the future, and (63) and (64) refer to a number of events of the same kind which have occurred in the past.

If, however, these events are to be represented as instances of some general law or principle or other, they have to be detached somehow from their setting in time, removed, as it were, from the context of actuality. A scientific explanation of the kind we are considering here is not concerned with the fact that a particular event occurred or might occur at some point in time but with the fact that a particular event exemplifies something more general. In a sense, then, by considering events as instances we neutralize the distinction between the particular and the general by showing the former as a kind of projection of the latter. The oddity of (59) can I think be explained by saying that the occurrence of the crash is reported

as an actual event which took place and not represented as an instance, in which case the fact that it actually took place is irrelevant. The question now arises: how can one represent instances by describing events in disassociation, as it were, from contexts of actuality?

The obvious way is to take a hypothetical statement. Thus we might represent the events referred to in (58) in the following manner:

(65) *A car will crash if its brakes and steering fail.*

Here a number of linguistic elements inter-relate to yield the illocutionary value of a hypothetical statement: the conjunction *if*, the indefinite noun phrase (*a car*), the “universal” present tense and the modal *will*. This kind of illocution particularizes an instance without specifying a particular event. There is no reference to a particular car, and no definition of the occurrence in terms of time or space. Notice that we cannot now establish a causative relationship between the crash and the failure of the brakes and steering. The following is not possible:

(66) *A car will crash because its brakes and steering fail.*

If we wish to provide an explanation, we have to restore what is referred to as event status by providing specification in the noun and verb phrases:

(67) *The car will crash because its brakes and steering will fail.*

or:

(68) *The car crashed because its brakes and steering failed.*

What these examples show is that it is not possible to account for an instance by citing another instance since instances are, by definition, only explicable by reference to the general principle they exemplify. Events may explain other events, but instances cannot explain other instances except through the mediation of a general principle of some kind. Hence whereas (67) and (68) are explanations, (65) is not. But it may meet a condition whereby another locution in relation to it can take on explanatory value. The constituent linguistic elements of (65) as a separate locution combine to provide it with the value of what we might loosely call a general statement. But according to the principle we have already established, this value is not constant. The value of a locution is dependent on the relationships which it contracts with other locutions in context. Consider the following:

(69) *If a car's brakes and steering fail when approaching a sharp bend at speed, the car will continue straight ahead and crash.*

Here we have an association of the same linguistic elements as in (65) with the result that the two locutions take on the same illocutionary value in isolation. (69), then, is also a “general statement”. If it combines with another locution, however, this value changes. Consider the following:

(70) *Every body remains in a state of uniform motion in a straight line unless acted upon by forces from outside.*

The association of the universal quantifier *every* with the noun *body*, which as a lexical item comes high up in the hyponymic tree, and with the universal present tense provides this locution with the value of a general law. If we combine these two locutions (69) and (70) we create an inductive explanation whereby the first represents a particular instance which is accounted for by the general rule expressed by the second:

- (71) *If a car's brakes and steering fail when approaching a sharp bend at speed, the car will continue straight ahead and crash. Every body remains in a state of uniform motion in a straight line unless acted upon by forces from outside.*

This is recognized as what I have called an inductive explanation because relationships are established across the two locutions between *car* and *body*, *continue straight ahead* and *remains in a state of uniform motion*, and between *brakes and steering* and *forces from outside*. We may say, then, that although there is reason for considering both (69) and (70) as in some sense general statements as separate locutions, when in association the first becomes the particular instance which the generalization represented by the second explains. It is interesting to note that the distinction we are making here is made also in Alexander (1963):

It is useful to distinguish between a *general statement* and a *generalization*. Calling a statement a generalization suggests that it was in fact arrived at by generalizing, by arguing from particular instances to a statement about all instances of the same thing, whereas calling it "general" does not suggest anything about the way in which it was reached ... Calling a statement "general" is saying something about the range of its applicability, whereas calling it a "generalization" is *also* saying something about how it was reached.

(Alexander 1963: 104-5)

In our terms, a generalization requires the condition that the particular instance upon which it is based is expressed through one or more related locutions.

7.2.4. *Inductive and deductive explanation*

We have defined a scientific explanation (or perhaps we might say more prudently, one common kind of scientific explanation) as being the accounting for a particular instance by reference to a general rule, and we have contrasted this with the "standard" explanation which involves accounting for one event in terms of another. We have seen how the description of instances as opposed to actual events can be achieved and how the resulting illocutions can change their value when the locutions which they form combine as linguistic elements to form illocutions of greater extent. We have made the assumption however that the scientific explanation we have been concerned with corresponds to the standard one in one respect. That is that the particular instance precedes the general rule in the same way as the event to be accounted for precedes that which does the accounting, that the particular instance is given in the same way as is the event to be accounted for. What I want to do now is to question whether we should consider this a condition on an explanation in the scientific sense.

I said earlier that in a scientific explanation one accounts for a particular instance in terms of a general rule. There are two points that can be made about this. Firstly, as we have seen, the instance is only recognized as such when it is related to the rule. There is therefore an inter-dependency between the two which does not hold between event and event, or one state of affairs and another. I can know about something without knowing how it relates to something else. If nobody tells me why John stopped, or if I am indifferent to the reasons for his stopping, this does not alter the fact that I know that he did stop. But I cannot know something as an instance until I know what it is an instance of. Secondly, since rules are based on the empirical observation of events and states of affairs and the subsequent recognition of common features which make them instances, one can say that a general rule is accounted for in terms of particular instances. When we are dealing with events or states of affairs, it is clear which is accounting for which. That which is to be accounted for is generally represented as occurring after the event or state of affairs that accounts for it. But instances and rules are mutually accountable and this is reflected in the fact that they can be related either by inductive or deductive reasoning.

In view of these considerations we will say that an illocution which relates particular instances to some general rule is an explanation, and that this may take the form particular – general, as in (71), in which case we may call it an inductive explanation, or it may take the form general- particular, in which case we may call it a deductive explanation. We can re-write (71) in deductive form as follows:

- (72) *Every body remains in a state of uniform motion in a straight line unless acted upon by forces from outside. If a car's brakes and steering fail when approaching a sharp bend at high speed, the car will continue straight ahead and crash.*

7.3. Summary: variation in value

What I have tried to do in this chapter is to extend the notion of value to cover not only the relationships between linguistic elements within a single locution but the relationships between locutions in larger stretches of discourse. The claim is that one can characterize discourse in terms of the value which linguistic elements assume and that the conditions which have to be met for a locution or a set of locutions to count as a particular illocution are to be found incorporated in the context. Although there are illocutions which are representable by independent locutions, it is commonly the case that they take on different values as these locutions combine with others. Furthermore, although one can talk about illocutions in an abstract sense by operating at a level of idealization which ignores language variation and context, one has to accept that the illocutions which occur in different types of discourse may be unique to that discourse in which they occur and may indeed be its defining feature. Thus one can set up conditions which account for what one supposes to be a central or elemental type of explanation but, as I have tried to show, it is necessary to allow that an explanation in scientific writing may have to meet different conditions. It does not seem to be possible to characterize a type of discourse by listing the most commonly occurring illocutions if

these have been defined by some preconceived formula, any more than it is possible to characterize it by listing the most commonly occurring linguistic elements (see Chapter 3.4). Even if we had sets of conditions for a wide range of illocutions similar to those set up by Searle for promises, these would be what I have called “standard” types, and there is no more reason for supposing that they would be common to all types of discourse than that they would be universal in all types of social community. The difference between giving a scientific as opposed to a standard explanation and in asking for a drink in Britain as opposed to asking for a drink in Subanun (see Frake 1964) is likely only to be a matter of degree.

As we have seen in Chapter 5 and again in this present chapter, different illocutions cannot be identified uniquely by reference to linguistic forms, if one assumes that the locution must carry illocutionary value within its own limits. That is to say, one cannot say that a command will always take the form of an imperative locution, that whenever an imperative is used a command will be performed. Similarly, one cannot make general statements to the effect that the modal *will* is always used to predict, or even that it is sometimes used to predict, since it is not the modal verb but the manner in which it relates with other linguistic elements in the locution which provides a locution with its rhetorical value. The point that has been repeatedly made in this study is that linguistic elements do not carry fixed meanings with them into contexts of use.

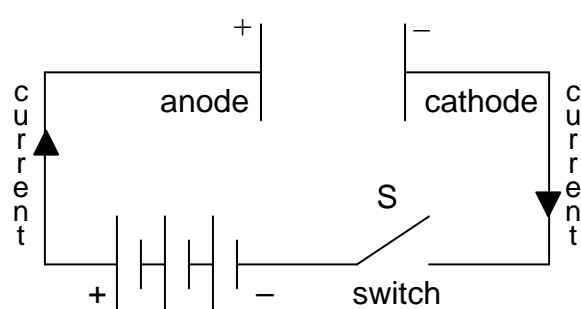
On the other hand, one must be careful not to go to the other extreme and disassociate linguistic form from communicative function altogether. As was pointed out in the previous chapter, value is a function of the relationship between code and context. What a locution counts as is not entirely dependent on the context, any more than it is entirely dependent on the code. Having pointed out the lack of match between say, imperative form and the illocutionary value of command, one has still to explain why it is that this form should take on different values, and that this value can be function of other forms. The explanation that has been given here is that for a locution to take on a particular illocutionary value it must meet certain conditions, some of which are represented by the inter-relationship of the linguistic elements within the locution itself. Others may derive from the situation of utterance in spoken discourse, but in written discourse it is generally the case that the other conditions are incorporated into the linguistic context, or co-text, so that the value of an illocution may be a function of the inter-relationship of locutions, which are seen as linguistic elements of essentially the same kind as those which are constituents of locutions. Ultimately, therefore establishing value is a matter of recognizing the function of linguistic elements but at the same time allowing that this function ranges beyond the confines of grammatical units.

7.4. Specimen analysis

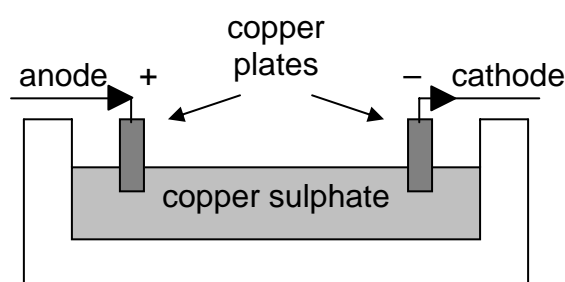
What I want to do in the rest of this chapter is to illustrate the approach to discourse analysis that has been outlined here before going on to further refinements in the following chapter. I shall also point to a number of pedagogic implications which will be developed in Chapter 10.

The following passage is taken from an introductory textbook in General Science. Notice that no claim is being made that this short extract is a representative sample of the corpus of “scientific English”. The analysis is intended as an illustration of the kind of approach that has been proposed and not as a characterization of scientific discourse. However, where points of more general relevance seem to emerge I shall say so, and attempt to substantiate them by citing from other texts. This is the passage:

¹A liquid which is decomposed when an electric current passes through it is called an electrolyte. ²The process is called electrolysis, and the two wires or plates dipping into the electrolyte are called electrodes. ³The electrode which is connected to the positive terminal of the cell or battery is called the anode. ⁴The electrode which is connected to the negative terminal of the battery is called the cathode.



15.1. (a) The electric circuit showing battery (B), anode (+), cathode (-) and switch (S). The current flows clockwise from the + battery terminal back to the - battery terminal.



(b) Two copper plates are dipping into copper sulphate solution. One plate is the anode (+) which is joined to the + terminal of the battery (see figure 1a). The copper sulphate solution is the electrolyte and the copper plates are the electrodes.

2. ⁵Let us examine what happens when two copper electrodes are used in a solution of copper sulphate. ⁶The circuit is shown in figure 15.1. ⁷The right-hand diagram shows the two copper electrodes dipping into the copper sulphate solution contained in a glass jar. ⁸The current enters by the anode (+), passes through the solution, enters the cathode (-), and then leaves the cathode as shown by the arrow. ⁹In the left-hand diagram, V represents the glass vessel containing the copper sulphate (electrolyte), and the two electrodes are marked + for the anode and - for the cathode.

¹⁰ *When the switch S is closed, the current flows from the - terminal of the battery B in the direction of the arrow to the anode (+) of V, through the solution to the cathode (-), then round the circuit through S back to the negative terminal of the battery B.*

3. ¹¹ *Before starting this experiment the weights of the two copper plates which are to be used for the anode and cathode must be written down carefully for future reference.* ¹² *Next, place the anode and cathode in the copper sulphate solution and connect them up to the battery B and switch S.* ¹³ *The switch is then placed in the 'on' position and the current is allowed to flow through the circuit for about half an hour.* ¹⁴ *The anode and cathode are then removed and dried carefully in blotting paper before being weighed a second time.*

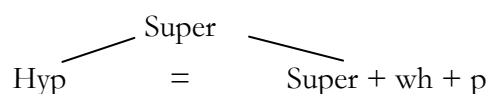
4. ¹⁵ *You will find that a surprising thing has happened.* ¹⁶ *The anode now weighs a few milligrams less than before and the cathode weighs a few milligrams more than before.* ¹⁷ *The weight lost by the anode is exactly equal to the gain in weight by the cathode.* ¹⁸ *In some strange way a few milligrams of copper have been removed from the anode and carried through the electrolyte by the current and have finally become firmly attached to the cathode.**

7.4.1. Definition and nomination

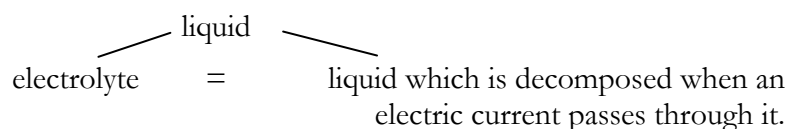
How can we go about describing this piece of language? If we regard it as text and adopt the kind of approach suggested by Crystal and Davy (1969) we shall emerge with information about the frequent occurrence of the passive and the universal present tense and so on. As was pointed out in Chapter 3 (3.4) such information is not of very much help. It might conceivably assist us in identifying that this passage is in some sense "scientific", but we already know this anyway. If we regard it as discourse, in the sense defined in Chapter 4 (4.1.3), we need to characterize it as communication and to consider what rhetorical value the linguistic forms have as illocutionary acts. We can begin by making use of the Jakobson/Hymes notion of speech functions, discussed in detail in Chapter 4 (4.4.1), and say that paragraph 1 is metalinguistic in function, consisting as it does of a series of definitions. We can attribute the illocutionary value of definition to these locutions because the conditions on such an illocution are met by the internal relationships between the linguistic elements within the locution itself. That is to say in each case a hyponym is equated with a qualified super-ordinate term in the following way:

* Extract from Ch. XIII of General Science by N. Ahmad, W.F. Hawkins and W.M. Zaki. Included in English Studies Series 3. ed. W.M. Hawkins and R. Mackin, London, O.U.P., 1966.

Formula IV:



Thus:



This equation may be realized by a number of linguistic elements including *is called*, *is known as*, *is referred to*, or simply *is*. These are not, however, in free variation. When *is* (or *are*) is the equating element the relationship between *definiens* and *definiendum* is bi-directional, whereas when the other lexical items are used it is not. Thus the following are both definitions:

- (73) *A liquid which is decomposed when an electric current passes through it is an electrolyte.*
 (74) *An electrolyte is a liquid which is decomposed when an electric current passes through it.*

Of the two, (74) seems intuitively to be more acceptable than (73) and we shall give substance to this intuition presently, but both count as definitions in that they correspond to the formula given. The following, however, makes no sense at all:

- (75) *An electrolyte is called a liquid which is decomposed when an electric current passes through it.*

How can we account for the unacceptability of (75)? I suggest that the reason is that although the locutions in paragraph 1 are definitions in that they conform to the formula given, they are not *only* definitions but something else as well. They are also, to borrow a term from Lyons (1972), nominations. That is to say in defining something they give it a name which can be used to refer to it in the following discourse. Obviously it is the *definiendum* which is named and not the *definiens*. The difficulty with (75) is quite simply that the *definiendum* is already named, and it is the *definiens* which is represented as a name. In other words, *electrolysis* is a name whereas *a liquid which is decomposed when an electric current passes through it* is obviously not. The difference between (74) and the first locution in paragraph 1, viz:

- (76) *A liquid which is decomposed when an electric current passes through it is called an electrolyte.*

can be made clear by reference to a distinction made in Alexander (1963) between real definitions and nominal definitions:

A nominal definition asserts a determination to use a certain expression as an exact equivalent and substitute for another expression. In this kind of definition the meaning of the definiendum depends solely upon that of the definiens; the definition gives the entire meaning of the expressions defined

...

A *real* definition states that two expressions, each of which has an independent meaning, are equivalent to one another. (Alexander 1963: 89-90)

We will say that in a real definition, such as (74), the equative element in Formula IV is realized by the copula *be* and the *definiendum* precedes the *definiens*, whereas the equative element in a nominal definition is realized by expressions such as *is called*, *is known as* and so on and the *definiens* precedes the *definiendum*. We can now account for the feeling that (73) is less acceptable than (74). (73) has the *definiens* preceding the *definiendum* and is thus a nominal definition, but this ordering is normally associated with the lexical items *is called*, *is known as* and so on, whereas *is* is normally associated with the reverse order which makes for a real definition. In (73), in fact, *is* is understood as having the value of such expressions as *is called*, which makes it a nominal definition. Only when it is understood in this way does the locution make sense.

We can see then that the ordering of elements in the locution in association with particular lexical items enable us to distinguish between one illocution and another. This analysis of (76) is further supported by its relation with the other locutions in the first paragraph of the passage. The function of nominal definitions, as Alexander implies, is to provide terms for future use. In the case of this passage, the writer wishes to describe the process of electrolysis but in order to do so he has to establish a set of terms which will serve his purpose. Just as in the laboratory the first stage of an experiment is to prepare the apparatus which is necessary to conduct it, so in the description of an experiment the first stage is to prepare the terms which are necessary to describe it. In this sense, the metalinguistic statements in paragraph 1 constitute the fulfilment of one of the conditions attendant on the description in paragraph 2. Notice that if the first locution of paragraph 1 had taken the form of a real definition – i.e. (74) – this would have implied that the term *electrolysis* had already been introduced into the preceding discourse, and it would function as some kind of clarification of a point previously made. For example:

- (77) *Particles of carbon collect on the cathode because copper sulphate solution is an electrolyte. An electrolyte is a liquid which decomposes when an electric current passes through it.*

We cannot have:

- (78) *Particles of carbon collect on the cathode because copper sulphate solution is an electrolyte. A liquid which decomposes when an electric current passes through it is called an electrolyte.*

If, however, the term has not been previously used, it is possible for a nominal definition to serve as a summary or conclusion, as in:

- (79) *Particles of carbon collect on the cathode because copper sulphate solution decomposes when a current passes through it. A liquid which decomposes when an electric current passes through it is called an electrolyte.*

This means that there would be nothing to prevent the first locution of paragraph 1 on its own from being a link with a preceding paragraph, as a kind of recapitulation from which the new paragraph is to develop. In other words, an alternative to (76) might be:

- (80) *A liquid which is decomposed when an electric current passes through it, then, is called an electrolyte.*

What prevents (76) having the value which the element *then* in (80) makes explicit is its association with the other locutions in the paragraph and the association of the paragraph as a whole with the one which follows.

What this discussion is meant to demonstrate is that the illocutionary value of the first paragraph of this passage can be determined by recognizing how linguistic elements relate with each other. We have seen that each of the locutions in paragraph 1 have the value of nominal definitions and that taken together they represent a condition on the felicity of the description in the following paragraph.

7.4.2. Definition and delimitation

Before moving on to the second paragraph, a further point might be made about the way definitions take on other values in relation to the discourse in which they occur. The way in which something is defined is determined not by any absolute criteria but by what it is that one is going on to say about it, or what it is that one has already said about it. If, for example, I am a physicist I might wish to define, say, water in the following way:

- (81) *Water is a liquid substance which has a specific gravity of 1 gm/cm^3 .*

If I am a chemist, however, I would presumably wish to define water in terms of its chemical rather than its physical properties and would therefore prefer a definition of the following kind:

- (82) *Water is a liquid substance which is a compound of hydrogen and oxygen.*

Part of the function of definitions therefore is to delimit the scope of the discourse in which they occur. Sometimes this delimiting function takes precedence over the defining function. Consider the following, for example:

- (83) *A barometer is an instrument which measures atmospheric pressure.*

The most likely function of a locution of this kind is to initiate a description of how a barometer works. Its value is not that it defines something which we are not already familiar with but that it establishes a topic. An alternative way of doing this is to make use of locutions of the following form:

- (84) *Water is a compound of hydrogen and oxygen.*
 (85) *Water consists of hydrogen and oxygen.*
 (86) *A barometer measures atmospheric pressure.*

When what appears from internal evidence within the locution to be a definition serves to delimit the scope of the subsequent description by establishing a topic in

this way, its value as a definition may diminish to the point where it ceases to be distinguishable from general statements like (84), (85) and (86). Where its value as a definition is likely to be in conflict with its value as a delimitation a locution conforming to Formula IV is generally avoided in favour of one conforming to the pattern of (84)-(86). The reason why a definition can couple with a delimitation is that in both cases there is a specification of certain attributes and those which serve as defining features may also be those which are most salient from the descriptive point of view. Where more detail is required in the delimitation, however, the definition ceases to be appropriate. The following, for example, initiates a description of casting processes:

- (87) *A casting is produced by the introduction of molten metal into a mould, of such a shape as to produce the required part, the molten metal solidifying to this shape in the mould.*

This represents a very precise outline of what the subsequent discourse is to develop, but details as to what shape the mould is to have and what is meant by *produce* are not defining features. There is a lack of match between what is required of a definition and what is represented here as a delimitation. The following, therefore, would not be appropriate:

- (88) *A casting is an object which is produced by the introduction of molten metal into a mould, of such a shape as to produce the required part, the molten metal solidifying to this shape in the mould.*

A description must begin somewhere. Where the most convenient beginning is with those features which can appropriately be contained within a definiens, then a definition can couple with a delimitation as the first stage of a description. Where this is not the case, descriptions tend to begin with general statements of the form of (84)-(86). For example, the following is a delimitation in that it is the initial locution in a description and indicates that the topic or theme is to be the operation of an electric bell:

- (89) *An electric bell operates by means of an electromagnet.*

But one would not expect the predicate expression here to serve as a *definiens* in the definition of an electric bell:

- (90) *An electric bell is an instrument which operates by means of an electromagnet.*

There is not the same match here, then, between defining and descriptive features as there is, or can be, in (83). Once again we see how the illocutionary value is determined by intra- and inter-locutionary relations.

7.4.3. Commentary

We may now turn our attention to the second paragraph in our specimen passage. Immediately we are met with a feature of discourse which, though touched on in Chapter 4 (4.4), has been ignored in the subsequent discussion. We have been assuming that the illocutionary value of a piece of written language can be derived

from the manner in which linguistic elements inter-relate, allowing that in spoken language the conditions upon which value depends may be realized by features of the extra-linguistic situation. But in paragraph 2, locutions 6-10 make little sense either in isolation or in combination. They depend upon their relationship with the diagrams, and in fact constitute a commentary upon them. The sole function of locution 6 is to effect the connection between the verbal and the non-verbal parts of the discourse.

If we are seriously concerned with the characterization of discourse as a mode of communication we cannot simply concentrate on its verbal aspects. Particularly in scientific and technical writing, a great deal of communication takes the form of line drawings, diagrams, charts, graphs, tables and so on, and their value is generally determined by the way they relate to verbal expression, just as the verbal means of communicating depend for their value on their association with these non-verbal forms. As a simple example of the way the value of a locution is determined by its association with a non-verbal communicative form, consider the following:

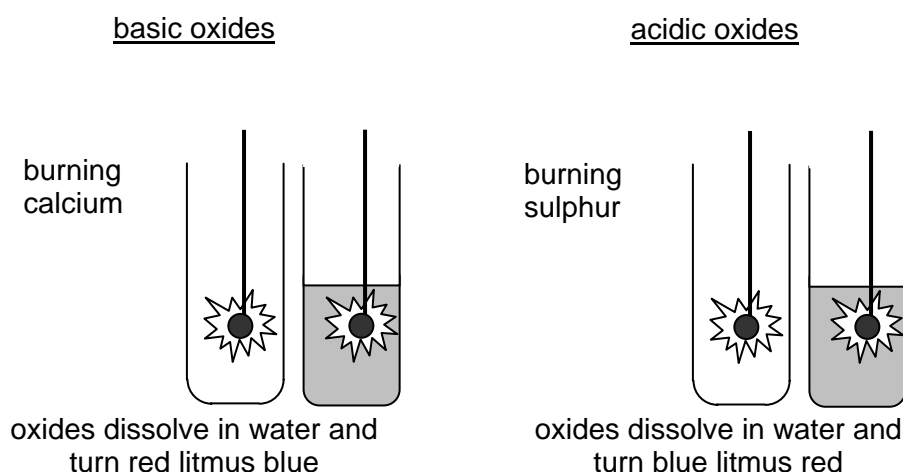
(91) *Oxides dissolve in water and turn blue litmus red.*

(92) *Oxides dissolve in water and turn red litmus blue.*

As isolated locutions, these have the appearance of general statements. They meet the necessary internal conditions for such illocutions in that we have a “generic nominal” combining with the universal present tense. But since one contradicts the other they cannot both be true. In fact they are both false as general statements since it is not true that all oxides dissolve in water. That is to say, not only are (91) and (92) false, but so is:

(93) *Oxides dissolve in water.*

One might suppose, then, that locutions like those would never occur in scientific writing since as general statements they are all false. But there is in fact no reason why they should not all occur and should not all be true. The solution to this paradox is that they do not have to take the value of general statements. They can derive their value from an association with a diagram and hence become captions, or commentaries, as in the following:



Here the association with the diagram provides the definite reference, so that the captions are equivalent to the following in a purely verbal context:

- (94) *The oxides dissolve in water and turn blue litmus red.*
 (95) *The oxides dissolve in water and turn red litmus blue.*

Another instance of the importance of taking non-verbal forms of communication into account occurs in the first locution of the caption to diagram b) in the passage. We are often told that the present tense in combination with continuous aspect does not appear in scientific writing but is “replaced” in some way by the universal present, and the reason commonly offered for this is that the scientist seeks to make statements of a universal and timeless kind. Now it is true that it is difficult to imagine a purely verbal context for:

- (96) *Two copper plates are dipping into copper sulphate solution.*

But I would suggest that the reason for this is that where there is no indication of future time reference and no association with verbs of directional motion like *go* and *come*, *leave* and *arrive*, the combination of present tense and continuous aspect provides a locution with the value of a commentary. Now it is one of the conditions of a commentary, reflected in the relationship between the linguistic elements just mentioned, that the event which is referred to should be concurrent with the actual act of communication. This condition is not an easy one to meet in written discourse since what is concurrent with the act of sending the message is not likely to be concurrent with the act of receiving it. It does happen that the combination of the linguistic elements which has been mentioned can be found in written discourse, as for example in the following:

- (97) *Basil is making good progress at school.*
 (98) *The industry is developing new techniques for the production of synthetic fibres.*

In these cases, however, what is being referred to is not a single event occurring concurrently with the communicative act but a process which both precedes it and presumably will continue after it. It seems intuitively right to limit what counts as commentary by invoking a further condition that what is referred to should be contemporaneous with the communicative act. We can give this distinction terminological recognition by saying that (97) and (98) are observations, and are to be distinguished from commentaries like the following:

- (99) *Basil is making a cup of tea.*
 (100) *Arthur is developing a film in the dark room.*

There is another case where what appears to be a commentary occurs quite frequently in written discourse, at least in that of personal correspondence. This is when the writer wishes to create a setting which the reader can share with him in his imagination. There is nothing anomalous, for example, in the following:

- (101) *I am writing this letter on the kitchen table. Agatha is washing up and Basil is making a terrible noise in his bath.*

But notice again how the question of value is relevant here. Since the function of (101) is not only referential but also contextual it is not only a commentary. It couples with another illocution, for which we might coin the nonce term *invocation*.

(96) is neither an observation like (97) or (98), nor an invocationary commentary like (101), since it refers to a contemporaneous event, which must be one of brief duration, and has no contextual function in the sense that it invokes no setting. Not only is it rare in scientific writing, therefore, but it is rare in any kind of writing, because there is a necessary lapse of time between the sending of the message and its reception. But if what is being referred to is actually presented to the reader at the same time, then the necessary conditions are fulfilled. This is the case here: the diagram confronts the reader with the very event which is being referred to and there is no anomaly. Again, it is the relationship between the locution and the diagram, between the verbal and the non-verbal form that yields the illocutionary value.

7.4.4. Commentary on instructional description

There is, however, another condition which has to be met for a commentary to be performed, one which we might call, following Searle, a sincerity condition. This would specify that the person to whom the commentary is addressed needs to have the event commented on. This is a condition which is very commonly violated in the classroom. If my wife in the company of guests gets up and goes to the door I simply do not say to the guests:

- (102) *My wife is going to the door.*

No commentary is called for here. I may of course be making some recondite joke, but then what I say is not a commentary: it has other conditions to meet. So when teachers of English introduce locutions like the following into their lessons:

- (103) *I am writing on the blackboard.*

- (104) *He is running to the door.*

it should be realized that although locutions of this kind might make some contribution to the teaching of signification and the mechanical manipulation of linguistic patterns, they have no illocutionary value other than that of metalinguistic demonstration. I shall return to this point in Chapter 10.

The question now arises, however: if locutions like (102), (103) and (104) have no illocutionary value that one can see, how does it come about that (96) does? Surely we have the same situation here: the locution is used to comment on something which needs no comment since it is already evident to the reader from the diagram. In fact I think the situation is somewhat different. In the first place, whereas (102)-(104) refer to something actually taking place, (96) does not: it refers to the *representation* of something taking place. Since a diagrammatic representation of reality is not always self-evident a commentary is often called for. The

same is of course also true of other non-verbal devices for conveying information like graphs, tables and so on. Symbols and labels are supplemented by verbal commentary, each deriving its value from the other. It may be objected that in the case we are considering, however, the diagrams are perfectly clear and do not need to be supplemented in this way. This is true, but by providing such a commentary, the writer is conforming to the conventions which obtain in this kind of writing, and by so doing is initiating the reader into an understanding of them.

It is important to recognize that this passage is not only a piece of “scientific” discourse, but is also a piece of “instructional” discourse. Its purpose is not just to describe what happens but to indicate how what happens is described in scientific terms. This is why there is so much redundancy. As we have seen, paragraph 1 is devoted entirely to the definition of terms. In paragraph 2 we find the information already provided in paragraph 1 repeated over and over again. For example, in spite of the fact that anode and cathode have already been defined as being positive and negative respectively, this fact is repeated each time these terms are used in both the diagrams and the text. Again, paragraph 2 is basically a repeat of the two captions under the diagrams which are in turn a repeat in verbal form of the information in the diagrams themselves. Such massive redundancy is not necessary for the conveying of the facts themselves. It is used to establish the manner in which they are to be conveyed, to present a model of explicitness and to ensure an understanding of the metalanguage and the conventionalized association of verbal and non-verbal means of communicating in scientific writing. One might regard the whole of paragraph 1 and paragraph 2, therefore, as “metacommunicative” and as constituting together the illocution of *initiating instruction* or something of this kind. Once again, we can see how the relationship between different locutions, sets of locutions, and non-verbal devices leads us to a characterization of different illocutions. Thus the association of paragraph 2 with paragraph 1 and the diagrams with their captions make it clear that it does not merely serve as a description in the sense of conveying information about something but is also instructional, in the sense that it conveys information about how to convey information. We might refer to such an illocution, which focuses on how rather than what, as an *instructional description*.

7.4.5. *Accounts, reports, and directions*

We may now turn our attention to paragraph 3. What is of immediate interest here is that although the whole paragraph might be said to fulfil a directive function in that it provides directions for carrying out an experiment, this function is carried out by the use of three different types of locution. Thus 11 makes use of the modal *must*, 12 is an imperative, and 13 and 14 take a declarative form. What is it that leads us to assign these locutions the value of direction? It would appear to depend upon our recognizing 12 as having the combination of linguistic elements which meet the necessary condition and then allowing the following locutions to take on this value by association. That is to say, we give 13 and 14 the value that they would have if they took the following form:

- (105) *Then place the switch in the 'on' position and allow the current to flow through the circuit for about half an hour. Next, remove the anode and cathode and dry carefully in blotting paper before being weighed a second time.*

But if 13 and 14 were not related to 12 we might be inclined to consider them as having a somewhat different value. One of the conditions on a direction is that the activity referred to should be represented as not having taken place already. To put the matter simply, one does not direct someone to do something unless it has not already been done. But in 13 and 14 there is no such implication that the activity has yet to be carried out. One might compare the following, in which the use of the modal *will* meets the condition of future reference:

- (106) *The switch will then be placed in the 'on' position.*

Considered together in dissociation from this passage, 13 and 14 in fact refer to activities in detachment from a time reference. There is an implication, however, that activities of the same kind have been carried out in the past. They are statements about how the experiment in question is carried out and such statements must of course be based on how such experiments have been carried out in the past. Let us call statements of this kind *accounts*. Accounts differ from directions in that they contain the implication that what is referred to has already occurred in the past, whereas directions contain the implication that it has not. Accounts can also be compared with reports. With reports, what is referred to has already occurred in the past and there is no implication that it will occur again in the future, whereas accounts generalize from what has occurred in the past and imply that it can also occur again in the future. We may give a simple formalization of this observation as follows:



As examples of these illocutions we might cite the following locutions as likely to have the rhetorical value indicated:

- (107) *The switch is then placed in the 'on' position. (account)*
 (108) *The switch was then placed in the 'on' position. (report)*
 (109) *The switch will then be placed in the 'on' position. (direction)*
 (110) *Place the switch in the 'on' position. (direction)*

We can of course make further distinctions between (109) and (110) to yield different kinds of direction, but at the present I am concerned with differentiating between the three illocutions represented in the diagram above.

By saying that paragraph 3 fulfils a directive function we are assuming that 13 and 14 in fact take on the value of direction by association with 12, the relationship with this locution neutralizing the internal relationships which provide it with the value of an account. But we could also claim that 12 takes on the value of an account by an association with 13 and 14 which neutralizes the value of this locu-

tion as an independent entity. Thus we might say that 12 is equivalent to a locution of the following form:

- (111) *The anode and cathode are placed in the copper sulphate solution and connected up to the battery B and the switch S.*

There would in fact appear to be good reasons why one should wish to have the influence working in this way rather than the other. In the first place it seems a little unrealistic (to say the least) to direct the reader to carry out an experiment which has already been presented in its essentials in the preceding paragraph and its supporting diagrams. Secondly, it is common to find a neutralization of directive value in instructional scientific texts. It is a matter of convention again that imperative locutions are inserted within descriptions and accounts without the writer imagining that the reader would ever think of acting on them as if they were directions. Generally directions are not embedded into the discourse but separated out, and what appear to be directions have their value as such neutralized by association with the other locutions in the discourse. This I would suggest is the case in this passage: it is the imperative locution 12 which takes on the value of an account as an element in the larger account represented by the paragraph as a whole.

The question now arises: why is the imperative with its directive overtones inserted into this paragraph? Why is the locution (111) not used instead? I think that the answer to this is to be found by relating it with 5 in paragraph 2 and 15 in paragraph 4. The point about 12 is that it appeals to the addressee and constitutes an invitation to participate. In this sense it has a contact or phatic function. By the use of locutions like 5, 12 and 15, and of questions to which of course the addressee cannot reply, the writer acknowledges the reader as a participant in the communication process and so maintains the necessary contact between them. The first locution in paragraph 4 (i.e. 15) is redundant as far as the information in the passage is concerned. Paragraph 4 could quite logically begin with 16 and would very likely so begin in any but instructional discourse. 15 simply serves to 'plug in' the discourse to the receiver. Hence we see that locution 12 in paragraph 3 has a complex value. In so far as it associates with the other locutions in the same paragraph it takes on the value of an account, but in so far as it associates with locutions in other paragraphs – 5 in paragraph 1 and 15 in paragraph 4 – it takes on the value of a contact illocution of some kind, an invitation to participate. Again we see that the characterization of discourse cannot simply be a matter of recognizing "standard" illocutions.

I shall take up the relevance of this kind of analysis to the preparation of teaching materials in Chapter 10. But before that I want to explore the possibilities of this approach to discourse analysis a little further. So far we have discussed the notion of value in relation to linguistic elements which correspond to lexical items and their combination on the one hand and to locutions and their combination on the other. Put simply we have been mainly concerned with words and sentences and we have tried to understand how they operate to communicative effect. But if we wish to understand how grammatical elements correspond with rhetorical units, we must also consider constituents other than words, and in particular those elements which derive from embeddings. The following chapter is a consideration of these.

CHAPTER 8

THE RHETORICAL FUNCTION OF TRANSFORMATIONAL RULES

8.1. Rhetorical and grammatical functions of transformations

In this chapter I want to try to extend the notion of value to take into account not only individual lexical and grammatical items on the one hand and locutions on the other but also elements of constituent structure which consist of the former and constitute the latter. One might say that in the previous chapters my concern has been with elements which correspond to the initial symbol of a derivation and with elements which correspond with terminal symbols: sentences on the one hand and lexical formatives, tense, aspect, modality and so on on the other. I want now to turn my attention to non-terminal symbols, to constituents represented by nodes higher up in the derivational tree, and I want to see how they combine in various ways to create different values in the locutions in which they occur. Since it is constituents of this kind that generally provide the domain of operation for transformational rules, the question arises as to whether the various ways such constituents may relate with each other to create value might not be described in terms of such rules. In other words, is it possible to think of transformations as in some sense rhetorical rather than grammatical operations.

From the grammatical point of view, transformations are seen essentially as devices for the preservation as it were of basic syntactico-semantic relations. That is to say, they link different surface forms to a common deep structure, or distinguish different deep structures for one surface form, the deep structure representing the “underlying” meaning. In the terms used in the previous chapters, then, transformations are the means of establishing signification. But we can also consider them as the means whereby basic linguistic elements combine to create value. In this case, we can regard them as rhetorical devices. The emphasis in grammar is on the fact that transformations preserve meaning in the sense of signification: what I wish to emphasise is that transformations allow for variation in value, that they are in a sense performance rules. Labov (1970) points out that it is possible to think of transformational rules as having to do with performance when discussing the desirability of having variable rules in a grammar:

... it must be noted that the great majority of our transformational and phonological rules may also be characterized as ‘performance’ rules. Extraposition, *wh*-attraction, adverbial postposing, etc. are all means of facilitating the linearization of the phrase structure input, eliminating discontinuities and left-hand embedding, co-ordinating and assimilating elements to one another so as to make the ‘performance’ of the sentence that much easier.

(Labov 1970: 60)

Labov is thinking primarily of performance as a psychological process and his remarks refer to the use of transformations for making sentences “easier” to interpret accounting for memory limitations and other constraints imposed by the limits of mental capacity. I am thinking of performance in the sociological sense and I am suggesting that it is not only that transformations may be seen as a

means of processing underlying structures to make them more easily communicable, but as a means of preparing such structures for the performance of different communicative acts.

8.1.1. *Illustration: existential and locative locutions*

Let us consider an example. In a discussion of the possibility of considering locative and existential sentences as being derivable from the same deep structure source, Lyons makes the following observation:

There is little or no difference in meaning between such sentences as *Coffee will be here in a moment* and *There will be coffee here in a moment*: one might suspect that they have the same deep-structure analysis.

(Lyons 1968: 390)

There is probably a good case for saying that these two sentences have the same signification and therefore for considering them as alternative surface forms of the same deep structure. That is to say, they exemplify the same basic syntactico-semantic relations. As locutions, however, they are not in free variation since there are contexts in which one would be used but not the other. Let us see what conditions such contexts would have to meet. For convenience of reference we will number the two locutions:

- (1) *Coffee will be here in a moment.*
- (2) *There will be coffee here in a moment.*

To begin at a general intuitive level, I would say (and others have agreed) that an utterance of (1) would imply that coffee is expected for some reason, whereas an utterance of (2) would not. This expectation may come from shared knowledge of the conventions which control the consumption of coffee, or the fact that the topic of coffee has been mentioned previously. We might say that (1) would have the effect of a confirmation of expectations already entertained for one reason or another, whereas (2) would be more in the nature of an announcement which created expectations which are not supposed to be in the hearer's mind beforehand. It might be noted in passing that "There will be ..." is a common formula for the making of announcements. But when reference is being made to something which the speaker presumes the hearer already knows about it is generally the definite article which is used, whereas the noun phrase in (1) is of course indefinite. If we provide (1) with definite reference we do not, however, change its illocutionary value:

- (3) *The coffee will be here in a moment.*

It does not seem to matter whether the definite article here is "anaphoric" or "homophoric" (Halliday 1966: 58): that is to say it does not matter whether coffee is in the hearer's mind because the speaker has mentioned it or because it is 11 a.m. and the customary hour for drinking it. Halliday talks about the anaphoric and homophoric uses of the definite article as "distinct relations into which 'the' as deictic enters" (Halliday 1966: 58), but it has to be recognized that in both cases its use relates to the notion of previous knowledge. In "anaphoric" reference the

knowledge comes from the context, and in “homophoric” it comes from the situation, including what Firth called the “context of culture”. Thus, in ushering her guests into the sitting room after dinner, a hostess might make use of either (1) or (3) without any previous mention of coffee having been made since the guests know that after dinner coffee is the conventional sequel. If however the situation were one in which coffee were not as it were a normal social concomitant, then (1) and (3) would only be appropriate if previous mention had been made. Let us suppose, for example, that some crisis like a fire or sudden illness has got people up in the middle of the night. In this situation, (1) and (3) could only be used if there had been previous reference to coffee. If not, (2) would have to be used.

The illocutionary similarity of (1) and (3) cannot, however, be captured in a common deep structure, unless one is prepared to leave the relationship between (1) and (2) unaccounted for. This is because, as has frequently been pointed out (see, for example, Lyons 1966a; Lyons 1968: 390; Jacobs and Rosenbaum 1968: 85), the transformation which introduces the existential *there* to yield forms like (2) does not operate on structures which have a definite noun phrase as subject. The following, for example, is ungrammatical:

(4) *There will be the coffee here in a moment.*

What has not been noticed (as far as I know) is that where there is an indefinite subject noun phrase, in some structures at least, the transformational rule appears to be obligatory in that if it is not applied we get a locution which is hardly less grammatical than (4), as in the case of the following:

(5) *A concert will be on the television tonight.*

If we take the line proposed by the Lakoffs (G. Lakoff 1970; R. Lakoff 1969), which was discussed in Chapter 5 (5.1.1; 5.4.1), we may say that (5) is only grammatical in certain restricted contexts, and the difficulty that one has in thinking of such contexts reflects its doubtful grammatical status. What is required is that the preceding discourse should have made mention of something which, in that context, has something to do with the concert but which is not so closely identified with it as to call for definite reference.

I would suggest that the reason why (4) is ungrammatical is the same as the reason why (5) is, in many contexts at least, unacceptable. The function of the transformational rule which introduces the existential *there* is to move an indefinite noun phrase from subject position, where it would give rise to the presupposition of previous mention, this being in contradiction to the non-anaphoric nature of the indefinite noun phrase. In simple terms, *there is/there are* has the effect of singling out a topic without making it definite, of specifying without particularizing. Put another way, it can be said to make a kind of self-contained definite reference without implicating the reference in previous mention.

We can say, then, that locutions like (2) and like:

(6) *There will be a concert on the television tonight.*

have an announcing function in that they introduce topics into the discourse which have not been referred to before. This explains the ungrammaticalness of (4): the definite article indicates that the topic has already been introduced previously and so needs no announcement. In (5), on the other hand, the use of the indefinite article suggests that the topic had not been previously mentioned and so does need to be announced. The topic is represented by a nominal derived from an underlying sentence by transformational treatment, and in this respect, the *there* transformation might be regarded as part of the grammar of English nominalizations, though it is not mentioned in Lees (1960). The difference between the *there* transformation as discussed here and the transformations which are discussed in Lees, however, is that in the case of the latter, the creation of the nominal is represented simply as a grammatical process and no rhetorical implications are suggested.

In the examples we have considered so far, the nominal consists of a noun phrase in which the predicate of the original sentence is embedded as a qualifying element. But it is not necessary for the topic to be announced to take the form of a complex noun phrase of this kind, as we can see from the following:

- (7) *There will be a row.*
- (8) *There is going to be a discussion about this.*

If one wishes to regard locutions of this kind as deriving from a deep structure in which the *there* element does not figure, but is simply introduced transformationally, one has to accept that the deep structure is not a potential utterance at all, that is to say, is not a locution. The following are ungrammatical:

- (9) *A row will be.*
- (10) *A discussion about this is going to be.*

To produce acceptable locutions from sentences in the deep like (9) and (10), the transformational rules will also have to replace certain of these sentential elements with lexical items to produce forms like the following:

- (11) *A row will take place.*
- (12) *A discussion about this is going to take place.*

It would seem to be the case that if the *there* transformation is not applied, then a lexicalizing transformation must be put into effect to convert the deep structure elements as written out in (9) and (10) into locutions like (11) and (12). Notice that even when locative elements are included in the deep structure, this lexicalizing operation makes for greater acceptability. One can compare (5) with the following:

- (13) *A concert will take place on the television tonight.*

Notice too that if such lexicalization takes place in conjunction with the *there* transformation, a locution of doubtful acceptability results. One can compare (6), for example, with the following:

- (14) *There will take place a concert on the television tonight.*

It would appear from this that although there are reasons for thinking of existential and locative constructions as having a common representation in the deep structure, transformational treatment has the effect of keeping them distinct, so that the combination of elements which constitute one surface form take on the value of a “localizing” statement which is dependent on what has preceded whereas the combination which constitutes the other surface form takes on the value of an “announcing” statement which does not have this dependency. In one kind of locution it is the locative feature which is in focus, and in the other it is the existential. So we can see that transformational rules have an essentially grammatical function in that they serve to equate locutions in respect of their common signification and an essentially rhetorical function in that they serve to distinguish them in terms of their different value.

8.2. Linear modification: Bolinger

In Bolinger (1952/1965) there is a long discussion on the different values which linguistic elements assume according to their relative positions in the locutions in which they occur. The different positions are of course the result of different transformational treatment of the same deep-structure source, and Bolinger’s observations will serve to illustrate further the rhetorical effect of transformations which we have been discussing. His general thesis is that the linguistic elements in a locution modify each other’s meanings from left to right as it were, following the linear arrangement. As he puts it:

Elements as they are added one by one to form a sentence progressively limit the semantic range of all that has preceded. This causes beginning elements to have a wider semantic range than elements towards the end.

(Bolinger 1952/1965: 279)

Of particular relevance to the argument here are the remarks Bolinger makes about the relative values of adjectives in preposed and postposed positions (though Bolinger does not of course speak in terms of value). He points out that it is the function of a preposed adjective to set up a “standard type” of what is referred to by association with the noun. That is to say, a preposed adjective has an essentially characterizing function, whereas a postposed adjective is used to refer to a “temporary state” or “momentary condition” associated with what the noun refers to. Thus it is that adjectives which are “stereotyped in post-position” refer to transient states. We may compare, for example, *a floating dock* with *a dock afloat* where the first refers to a kind of dock, one which was designed to float, whereas the second refers to a dock that happens by some mischance to have come away from its moorings (if such an occurrence can be imagined). One can make the same distinction with such pairs of locutions as the following:

(15) *The only navigable river is to the north.*

(16) *The only river navigable is to the north.*

Bolinger observes that in (14) the river is characterized as the only navigable one whereas in (15) there is a suggestion of the navigability of the rivers being a temporary state of affairs, that the river which is navigable happens to be the only

one which is so at the moment. The same distinction between the effect of preposing as opposed to postposing can be made with respect to participial adjectives as well. These combine with the noun and they qualify to create a kind of compound semantic unit in which they themselves lose something of their elemental quality. As Bolinger puts it:

... the qualifying word is transferred from its literal meaning and specialized in some figurative or restricted sense ... the participle partially loses its identity.
(Bolinger 1952/1965: 301)

In the terms we have been using, the participle takes on a particular value in association with the noun it qualifies. This transference of meaning in participial adjective-noun constructions is just one example of the kind of semantic conditioning that takes place in discourse whereby the signification of linguistic elements is modified by the context to yield rhetorical value.

We may say (though Bolinger does not put the matter in these terms) that the value of the adjective-noun arrangement is different from that of the noun-adjective arrangement and that this difference is a function of the relationships which these different arrangements bring about. We have here the same kind of phenomenon as that discussed in the previous chapter when we discussed the way locutions alter their value in accordance with their positions relative to each other (7.3). The difference in value arising from a change of ordering of adjective and noun elements is no different in kind from that exemplified by the following for example:

- (17) *The solution is heated. Hydrogen is given off and passes through the delivery tube.*
- (18) *Hydrogen is given off and passes through the delivery tube. The solution is heated.*

The activity referred to in the second locution of (17) is a consequence of that referred to in the first locution, but this relationship does not hold between the locutions of (18), where the activity referred to in the first locution relates to what has been mentioned in previous discourse. The difference between preposed and postposed adjectives may also be a matter of how a locution is linked with what has gone before. Since the preposed adjective combines with the noun to form a compound lexical unit which represents a kind of sub-class of what the noun itself refers to, it can often be used as an identifying reference (see Sampson mimeo). Thus, whereas the noun-adjective ordering very commonly establishes an internal value which does not depend on links with other locutions in the discourse, the adjective-noun ordering very commonly implies such links. Bolinger himself speaks of “first instance” and “second instance” and comments

... if we reword *The advancing soldiers halted* as *The soldiers advancing halted* ... we achieve a selective contrast that does not depend on any previous sentence in the chain of discourse. But if we said *The advancing soldiers halted* we should almost certainly be in the ‘second instance’ setting someone right who had mistakenly asserted that it was the retreating soldiers.
(Bolinger 1965: 285-6)

The main point is, however, that *the soldiers advancing* is unlikely to serve as a “second instance” or “identifying reference” because the postposed adjective has the effect of distinguishing between these advancing soldiers and other non-advancing ones so that it cannot appropriately be simply a referential counter as it were of a previously established referent: all that is previously established is *the soldiers*. To put it another way, *the soldiers* are “given” but *advancing* is “new”. In *the advancing soldiers*, on the other hand, both are given, so that this noun phrase can serve as an identifying reference (so long as there is no contrastive stress on *advancing* of course).

The sub-classifying function of the preposed adjective then serves to create a lexical unit which can act as a kind of counter for what has been established as a referent beforehand. One might say that it constitutes a contextual hyponym of which the noun head is the superordinate term. As was pointed out in Chapter 6 (6.5) contextual creations of this kind have a way of passing into the language code, particular values being conventionalized into a general signification as the language develops to meet new communicative needs. Thus the adjective-noun arrangement can create code hyponyms like *small talk*, *strong box* (from Lees 1963), *running sore*, *sparkling plug* and so on, and hence to exocentric constructions. This sub-classifying process explains why of the following (19) is not self-contradictory while (20) is:

(19) *Some working men had no work to do.*

(20) *Some men working had no work to do.*

8.2.1. Speculation: the ordering of adjectives

It is tempting to suggest (and I shall yield to the temptation) that this function of the preposed adjective goes some way to explaining the perplexing problem of the ordering of adjectives in preposed position. Why is it, for example, that the following are recognized as being in the right order:

(21) *The big red bus, the big red powerful bus.*

whereas the following are just as clearly recognized as being in the wrong order, in an order which obliges the reader to give the phrases a “listing intonation” indicative of an absence of any classifying organization:

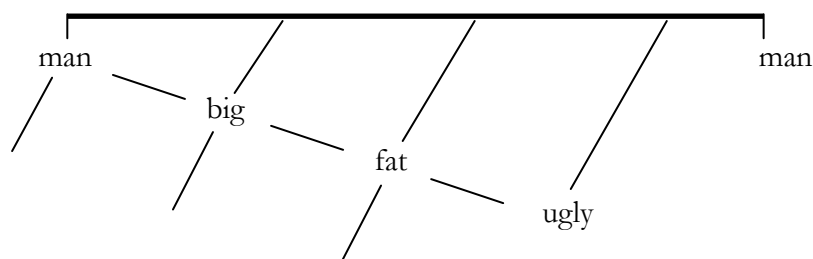
(22) *The red big bus, the red powerful big bus, the powerful red big bus.*

One might suggest that noun phrases of the kind given in (21) are so arranged that the principal classifying criterion comes first in each case. This will be the most general and the other adjectives will be ordered according to a scale of generality with the one closest to the head word representing the most particular criterion. Thus, to use the terminology of Leech (1969), a polar term like *big/small* will have a higher degree of generality than a term from a multiple taxonomic system like *red/yellow/blue* and so on since it yields only two sub-classifications. If there is a choice between polar terms, the less specific will take precedence over the more specific: thus *The big fat man* is acceptable whereas *The fat big man* is not. The most general classifying criteria will also of course be

the most apparent and uncontroversial, which accounts for the acceptability of *The short fat man* and the unacceptability of *The fat short man*. By the same token, attributes which depend on personal judgement and opinion come closest to the head noun, as in phrases like: *The tall dark handsome stranger*.

I am not claiming that this general principle of ordering is invariably adhered to but simply that it might serve as a norm against which variations can be set. For example, phrases like *A beautiful big house*, *A lovely young girl* reveal orderings which are at variance with the general rule that has been suggested. Having established the general rule, one can explain such departures from it by saying that it appears not to apply invariably to “expressive” terms like *lovely*, *beautiful*, *delightful* and so on, but only to terms which are “referential” (See Jakobson 1960; Hymes 1962; and the discussion in Chapter 4 (4.4.1) of this study). Thus if such characteristically expressive terms like *beautiful* conform to the general ordering principle then they take on referential rather than expressive force, as in *A big beautiful house*.

What is being suggested in effect is that the ordering of preposed adjectives is a linear projection of a hyponymic tree each node of which represents a further sub-classification, the highest node corresponding to the leftmost adjective in the line and the lowest node to the rightmost adjective. We might show this diagrammatically as follows:



It is of course not being suggested that this diagram represents in any sense the signification of these items, that in the code of the language *fat* is a hyponym of *big*, or a fat man is a kind of big man in the same way as a tulip is a kind of flower. What I am suggesting is that the principle of generality which I have described operates to give lexical items a hyponymic value in relation to each other in context. Thus a big fat man is a kind of big man and not a kind of fat man, and a big fat ugly man is a kind of big man or a kind of big fat man but not a kind of ugly man. What we are discussing is the manner in which sense relations are created by the values which lexical items take on in context, other examples of which have been mentioned in Chapter 6 (6.5 and 6.6).

8.3. The rhetorical function of embeddings

Let us now return from this excursion into speculation to consider the relevance of transformational rules to the different values which adjectives assume according to their position in relation to the head noun. Bolinger's paper was originally published in 1952 and his treatment of the question does not of course draw on a transformational model of description. Although what he has to say is highly perceptive and stimulating, there is a certain lack of precision in his account. He men-

tions that the phenomenon of linear modification has been noticed by Poutsma (1928) who speaks of “emphasis” and “suspense” which results from varying the order of linguistic elements, and by Curme (1931) who talks about relative “importance”, but criticizes them both, for being vague and imprecise. These are his comments on Curme:

He cites, among other examples, *Yesterday I met your father* and *I met your father yesterday*. In what sense *yesterday* is more “important” in one example than in the other is hard to see – in one it is more important by being more inclusive, in the other it is more important by being more selective. “importance”, “stylistic difference” and the like are traps. The adverb *again* may be both more “important” and more “emphatic” in *Again he told me* than *He told me again*, but it precedes, nevertheless, for a reason that neither importance nor emphasis can explain. (Bolinger 1965: 285)

However, Bolinger’s reasons are themselves not very precise. He talks in terms of meanings being “broad” and “narrow” in relation to their position in the “horn of the sentence”, of adjectives “overshadowing” the following noun, and of adverbs “colouring everything that follows”. A good deal of what he says is expressed in metaphorical terms and while it rings true it has a somewhat impressionistic air to. What I want to do is to try to give a more exact formulation of the phenomenon of linear modification in terms of the operation of transformational rules as rhetorical devices, in the sense previously defined in this chapter (8.1), and to relate it to other features of discourse.

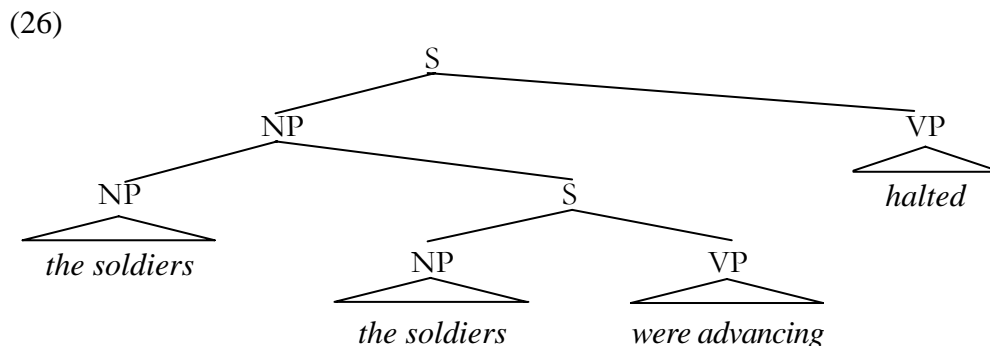
First of all, we will notice that the two locutions:

- (23) *The advancing soldiers halted.*
 (24) *The soldiers advancing halted.*

are alternative surface forms of the same deep structure, and that they are related to a third alternative:

- (25) *The soldiers who were advancing halted.*

All three derive from a common deep structure which might be represented as follows:



Each of the three locutions given above represents an output from a different stage of transformational treatment. Thus (25) represents an output from the first stage whereby the embedded subject NP is replaced by a *wh*- pronoun to yield a

relative clause. (24) represents an output from the second stage whereby this pronoun and the auxiliary verb are deleted, and (23) represents an output from the final stage whereby what remains of the relative clause in the form of a participle is transposed to precede the matrix noun. Since all three derive from the same deep structure (26) to which they are linked by these transformational operations they all have the same signification. But we have already seen that (23) and (24) can be distinguished in terms of their value: the different ordering of the adjective and noun has an effect on their relationship and hence provides different illocutionary value. One may say, then, that in this case the transformational rules develop different values from the same signification. But what about (25)?

8.3.1. *The value of different transformational outputs*

It is important to notice that at each stage of the transformational operation described in the previous paragraph the embedded element loses more of its character as an independent locution and correspondingly increases its dependence on the matrix locution. We have already noticed that because of its classifying function the preposed adjective is closely related to the noun head, even to the extent of creating a single lexical item, whereas the postposed adjective does not have this function of creating a single “unit of meaning”. The information it provides is as it were immediate to the statement and a necessary part of what the speaker wishes to say. To illustrate this we can consider the following examples (again from Bolinger 1952/1965):

(27) *The only agreeable person was John.*

(28) *The only person agreeable was John.*

(27) is a statement about what kind of person John was and its function is to distinguish John from other people by setting up a temporary class of agreeable people. It is as if a class of agreeable people exist before the statement is made and the purpose of the statement is to single out John as a member of it. In (28), on the other hand, we have a statement not about what kind of person John was but about the way he behaved, and *agreeable* therefore becomes a key item of information, immediate to the statement in the sense that it is the principal purpose of the statement to present it.

In the case of these two locutions of course, the item *agreeable* has two significations and this accounts for the fact that the following is ambiguous out of context:

(29) *Only John was agreeable.*

But notice how the ambiguity can be resolved. In the following, (30) corresponds to (27) and (31) to (28):

(30) *John was the only agreeable person.*

(31) *John was the only person who agreed.*

The ambiguity is resolved by emphasising that (27) and (30) refer to one of John's attributes, which is of a relatively permanent nature, whereas (28) and (31) refer to one of his activities which is a temporary phenomenon. This correspon-

dence again points to the fact that the postposed adjective in (28) represents an independent item of information and is not compounded with the noun as is the case with the preposed adjective in (27). This is further borne out by the fact that an alternative version of (28), which would avoid the possible ambiguity of (29), would be the following:

(32) *Only John agreed.*

or:

(33) *The only person who agreed was John.*

It is not possible to replace (27) with a locution containing a verbal construction with *agree*, which makes explicit the dynamic and temporary value of agreeable in (28). Any version of (27) must retain the adjectival form.

We have seen that in the case of these particular locutions at any rate the use of the form with a relative clause, the first stage output, can make for greater explicitness. This is, I think, a general property of such forms since they are bound to express more fully the meaning relations which are made explicit in the base. Whereas ambiguity is common in adjective-noun constructions, that is in third stage outputs, it only seems to occur in relative clause constructions when, as is the case with:

(34) *The only person who was agreeable was John.*

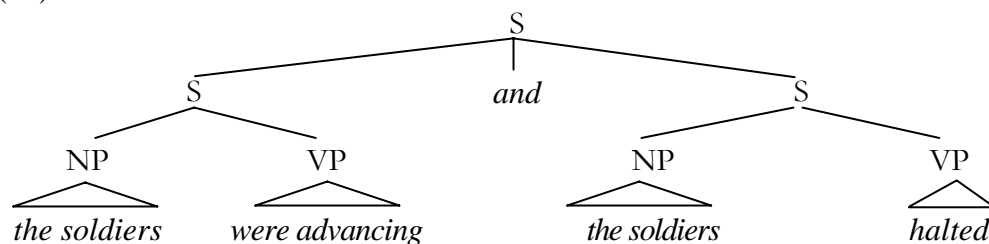
ambiguity attaches to an individual lexical item rather than being a function of the relationship between linguistic elements. The possibility of ambiguity necessarily decreases with a fuller expression of the unambiguous representation of underlying structure in the deep.

With this in mind, let us now return to the advancing soldiers. Earlier I said that (23), (24) and (25) were alternative surface forms which all derived from a deep structure such as (26). Although this is true, it is not of course the whole story since (23) may also derive from a deep structure which at an earlier transformational stage would yield:

(35) *The soldiers, who were advancing, halted.*

There is considerable lack of agreement as to how non-defining relatives of this kind should be represented in deep structure (for a discussion on the issues involved see Stockwell, Schachter and Partee 1968) but let us for our purposes assume something like the following:

(36)



The output from the earlier transformational stage provides an explicitness which is lost at the third stage, but which is still retained to a lesser degree at the second stage. That is to say, (24) cannot derive from (36) but must derive from (26). As Bolinger implies, whereas the soldiers in (23) may be either all of them or just those who were advancing, in (24) they are advancing rather than non-advancing ones, and there is no ambiguity. Again there is an increase in explicitness with a decrease in transformational treatment.

So far we have been considering cases where each stage of the transformational operation yields a locutionary output. But in many cases there is no such output from stage 2, and if there is, then there is no output from stage 3 – indeed the conditions are not such as to make stage 3 possible in normal circumstances. Consider, for example, the following:

(37) *The man who was disagreeable insulted me.*

(38) **The man disagreeable insulted me.*

(39) *The disagreeable man insulted me.*

Here (38) is a sentence without being a locution in the sense that it exemplifies the operation of grammatical rules but does not represent a potential utterance (see Chapter 6 (6.3)). As a sentence it corresponds to (24). Note that if we represent it as deriving from an underlying structure like (36), then it takes on the character of a locution:

(40) *The man, disagreeable, insulted me.*

But we have to insert graphological indicators like commas, or in speech phonological indicators like pauses, to make this clear, and these must of course be transformationally introduced. Again we see how explicitness attaches to the earlier transformational stages: (39) could derive from either (38) or (40) as sentences.

Since only (37) and (39) are locutions then the contrast here is between a stage 1 output and a stage 3 output, the first being explicit and the second being inexplicit to the point of ambiguity. We can also have a contrast between a stage 1 output and a stage 2 output, where the sentence at stage 2 does not meet the necessary structural conditions for the third stage of the transformational operation to take place. Consider, for example, the following:

(41) *The workers who are at the mine are on strike.*

(42) *The workers at the mine are on strike.*

(43) **The at the mine workers are on strike.*

But here the stage 2 locution has the same kind of ambiguity as the stage 3 locution of (23) and (39). Whereas (41) makes it clear that it is the workers at the mine as opposed to others who are on strike, (42) could be interpreted to mean either that, or that all the workers referred to are at the mine and they are all on strike. In other words, (42) could be derived from a deep structure of the (36) type, in which case the first stage sentence to which it relates would be:

(44) *The workers, who are at the mine, are on strike.*

Again we see how the stage 1 locution has an explicitness which the locutions of the other stages lack. Second stage locutions may be ambiguous (as in (42)) or may not (as in (34)) and this appears from the present evidence at least to depend upon whether a third stage locution is possible or not. It would seem that if it is possible, then the second stage locution is not ambiguous, but if it is not possible then the ambiguity attaches to the second stage locution.

It might be objected that in the case of (41)-(43) there is in fact a third stage locution but that it takes the following form:

(45) *The mineworkers are on strike.*

But this cannot derive from the kind of deep structure which underlies (41) and (42). Here mineworker is a single lexical item and although one can represent its signification by postulating an underlying sentence displaying a verb-prepositional object structure (see Lees 1963: 166-7), it cannot take on the value that is required for it to be associated with (41) and (42). The workers referred to in these locutions are not necessarily mineworkers: they are workers who may be builders, electricians, or what have you. The type of workers is not specified in (41) and (42) whereas it is specified in (45).

8.3.2. *Locutionary independence and explicitness*

So far we have been considering embeddings which have the form of copula constructions or constructions with simple verbal predicates. More complex embeddings do not allow the operation of the transposition transformation and in this case we have just two locutions: an output from stage 1 and another from stage 2. Consider the following:

(46) *The men who are working down the mine have a dangerous job.*

(47) *The men working down the mine have a dangerous job.*

But notice once more that there is an ambiguity about (47) which is avoided in (46). It could mean that the men who happen to be working down the mine at the moment have a difficult job, perhaps because of the temporary hazard of flooding or fire, for example. In this case, (47) relates to (46) where the activity of the men is set explicitly in present time. On the other hand, (47) could mean that the men whose permanent job it is to work down the mine are permanently in danger. In this case it is related to the following:

(48) *The men who work down the mine have a dangerous job.*

The transformational deletion then creates ambiguity, or to put it another way gives the resulting element a greater range of potential value. I shall take up the rhetorical implications of ambiguity in the following section. Meanwhile it is worth pointing out that stage 2 transformations not only efface aspectual distinctions but tense distinctions as well. Consider the following for example:

(49) *The train arriving at platform 3 is the 6.10 to Dundee.*

(50) *The train arriving at platform 3 was the 6.10 to Dundee.*

(49) is the kind of announcement given at railway stations when a train is about to arrive or is actually arriving. The first stage locution which would correspond to it would be:

(51) *The train which is arriving at platform 3 is the 6.10 to Dundee.*

In the case of (50), however, the reference is to past time and the corresponding first stage locution would have to be:

(52) *The train which was arriving at platform 3 was the 6.10 to Dundee.*

Again, consider the following:

(53) *The train arriving at platform 3 will be 2 hours late.*

Clearly there is no question here of the train's imminent arrival, so a second stage locution like (51) will not do. What is meant here is that the train which usually arrived at platform 3 will be late, or perhaps that the train which will eventually arrive at platform 3 will be late. There are then two possible corresponding locutions here:

(54) *The train which arrives at platform 3 will be 2 hours late.*

(55) *The train which will arrive at platform 3 will be 2 hours late.*

One can even make use of the deleted relative form when there is no possibility of the train's arriving at all. The following, for example, is not necessarily self-contradictory:

(56) *The train arriving at platform 3 has been cancelled.*

Here the locution admits of the kind of interpretation indicated by (54) and one might suggest the following as a second stage version:

(57) *The train which (usually) arrives at platform 3 has been cancelled.*

But a more likely version would perhaps be:

(58) *The train which used to arrive at platform 3 has been cancelled.*

These examples serve to illustrate the point made previously in this chapter that as the embedded element loses its character as an independent locution, so its dependence on the other linguistic elements in the matrix locution increases. The examples we have been considering are cases where the embedding is an active construction, but it is easy to see that similar observations can be made about elements which are the second stage outputs of the embedding of passive constructions. We might, for example, compare the following:

(59) *The results which were obtained were unsatisfactory.*

(60) *The results obtained were unsatisfactory.*

(61) *The results which will be obtained will be unsatisfactory.*

(62) *The results obtained will be unsatisfactory.*

8.3.3. *The rhetorical function of ambiguity*

It has been frequently pointed out in the preceding discussion that second and third stage locutions are very often ambiguous. From the grammatical point of view the principle interest of ambiguities is that they illustrate the need to establish a transformational link between surface and underlying structure. The impression that is sometimes given is that ambiguities are a kind of blemish on the language, an unfortunate consequence of the “real” meanings in deep structure being conflated. Furthermore it is commonly suggested that when the language user comes across an ambiguity he is obliged to stop and work out the required meaning by reference to the relevant deep structure (see 7.1.2). From this point of view transformations are seen as devices for resolving troublesome problems of interpretation. From the point of view adopted in this study, on the other hand, transformations are seen as devices for creating ambiguity, and ambiguity is seen not as a problematic feature of the language system but as a normal and necessary feature of language use.

As was pointed out in Chapter 6 (6.4), contrary to what some linguists appear to believe, the language user is seldom troubled by ambiguity. This is because the natural use of language involves giving value to linguistic elements by relating them to others. One is not called upon to interpret isolated locutions in the normal circumstances of language use. As a discourse develops information is carried over from one part of it to the next, and the meaning of a particular illocution is cumulative in that it depends on what has preceded. “Ambiguous” elements like the adjective-noun constructions we have been considering are necessary because they serve as counters by means of which information already given can be identified. They are in effect pro-forms of a kind, and like all pro-forms are by their very nature unspecific until provided with value in context. Out of context they are bound to be ambiguous. If we did not have such pro-forms we would be required to establish an item of information each time we wished to refer to it. Such a procedure would not only be tedious but it would run counter to the natural organising function of language. This function is of course reflected in syntactic structure whereby single items of information in the shape of formatives are related in patterns of dependence, subordination and so on. The same principle operates with items of information which take the shape of locutions: If they were simply strung together in a sequence each item would have the same independent character and would not combine to form a structure, but simply constitute a list. Let us consider an example.

We have already seen (8.2.1) that if preposed adjectives are not arranged in a certain way they simply represent a set of separate attributes which are unrelated one with the other. For example:

(63) *The ugly big fat man insulted me.*

(64) *The big fat ugly man insulted me.*

The noun phrase in (64) has structure whereas that of (63) does not. But now if we restore each of these adjectives to the locutions from which they derive and string them together, we get this:

- (65) *The man was big. The man was fat. The man was ugly. The man insulted me.*

These, we may say, represent the items of information which have been combined in (64) but given independent status. Each is of equal importance and is simply one in a series of undifferentiated statements, one in a recital of facts. If we wish to relate them, we can do so by embedding, and by means of the T-rel rule we can produce the following first-stage locutions.

- (66) *The man who was big and who was fat and who was ugly insulted me.*
 (67) *The man who was big and who was fat and who insulted me was ugly.*
 (68) *The man who was big and who was ugly and who insulted me was fat.*

and so on.

Now the locutions in (65) have been combined in such a way as to make one unit of information more prominent and the other subordinate to it. But at this level of subordination the three embeddings still retain their locutionary independence to some degree and they do not combine to form a structure. We can, for example, shift them around to produce:

- (69) *The man who was fat and who was ugly and who was big insulted me.*
 (70) *The man who was ugly and who was fat and who was big insulted me.*

If by deletion we reduce this independence, however, then the sequence becomes significant:

- (71) *The man who was fat and ugly and big insulted me.*

(71) has a distinct oddity about it because the decrease in independence is required to correspond with an increase in structure and as we have seen there are rules of ordering of adjectives which those in (71) do not follow. Finally, independence is further decreased by transposition and now the items of information have to combine with others as constituents of established patterns and have to conform to the rules of ordering. At the same time, they take on a fully identifying function. As separate locutions each of them provides new information and so has establishing function (the terms “identifying” and “establishing”, as pointed out previously in this chapter, are from Sampson mimeo). Even when they are incorporated into one locution at the first stage of transformational treatment they retain some of this function in that the repetition suggests a careful rehearsal of facts which the hearer might by forgetfulness or obtuseness not be fully aware of. But notice that as the items of information combine to produce an identifying noun phrase such as that in (64) the resulting noun phrase becomes ambiguous in consequence: (64) could be the third stage locution of which the second stage version would be:

- (72) *The man, who was big and fat and ugly, insulted me.*

From the rhetorical point of view, then, the transformations which are involved in embedding elements into noun phrases can be seen as the means whereby separate and independent items of information are combined and given varying degrees of prominence. The greater the transformational treatment, the

less independent the embedded element becomes, and the more dependent it is, not only on the other elements in the locution but also on what has preceded in the discourse or on what is understood from the situation of utterance. Thus ambiguity can be seen to attach to those elements which lose the value of independent reference but combine with others to identify a reference outside a particular locution, thus relating the locution with the discourse of which it forms a part. Ambiguities are necessary because such identifications are necessary for discourse to develop, and by creating them transformations function as rhetorical devices.

8.3.4. *The functions of transformations in discourse*

Let us now consider another example of the way transformations can operate to create patterns of discourse from individual elements. The following is a short passage from an elementary textbook on physics:

- (73) ¹*Electric meters are devices which measure electric current and other electrical quantities and indicate the quantity measured.* ²*The heart of an electric meter is the meter movement.* ³*The movement translates electrical energy into mechanical energy which causes visual indication.* ⁴*The indicator usually is a pointer across a calibrated scale.*

The deep structure of this passage will provide us with a breakdown into separate information units like the following:

- (74) *Meters are electric. Meters are devices. Meters measure current. The current is electric. Meters measure quantities, and so on.*

Notice that the reduction of the passage to a list of information items yields a series of sentences which require transformational treatment before they can take on the character of locutions. By providing such treatment we can produce a number of different outputs. Thus we might allow the following locutions to emerge after the minimum amount of transformational treatment:

- (75) *Meters which are electric are devices which measure current which is electric and which measure other quantities which are electrical and which indicate the quantity which is measured. The heart which a meter which is electric has is the movement which the meter has. The movement translates energy which is electrical into energy which is mechanical which causes indication which is visual. The indicator usually is a pointer which is across a scale which is calibrated.*

Although these are perfectly correct sentences, it is obvious that they have shortcomings as locutions, and this is because each item of information is undifferentiated and given equal prominence. The grammatical structure is impeccable but the rhetorical structure is wrong since it provides no indication of the relative importance and relevance of the facts which are presented, nor how, if at all, they are related. Put simply, we do not know what the passage is really about. Clearly what is needed is further transformational treatment, not to make the passage grammatical (which it already is) but to give differential prominence to the information presented.

Thus in the first locution deletion and transposition operate to yield *electric meters*, *electric current* and *electrical quantities*. The implication here is that these will be understood as lexical items in their own right and to refer to preceding discourse or previous knowledge. To retain the first stage forms as in (72) would carry the implication that what is being discussed is meters which are electric as distinct from meters which are not, current which is electric as opposed to current which is not, and so on. Since the point of the passage is not to compare different kinds of meter and current, these forms are too explicit for the purpose of this description. We do need explicitness, however, in the definition, and here the first stage form is retained. The second stage version:

- (76) *Electric meters are devices measuring electric current and other electrical quantities and indicating the quantity measured.*

seems less acceptable. The reason for this would appear to be that it carries with it a suggestion of actuality which is contrary to the generality which is required of a definition. As we have seen, second stage outputs with the present participle may take on a range of different values and here it seems as if there is some interference from a possible first stage version other than that of locution 1 in (73), viz:

- (77) *Electric meters are devices which are measuring electric current.*

It is interesting to note that when there is a double embedding this interference does not occur. For examples consider the following:

- (78) *Electric meters are devices which are used for measuring electric current.*

Here the present participle form is embedded in the past participle form and it is the latter which takes on different values when deleted to become a second stage form, the former's value remaining constant. Thus it is quite common to find definitions like:

- (79) *Electric meters are devices used for measuring electric current.*
 (80) *Electric meters are devices for measuring electric current.*

In fact, later in the passage from which (73) is abstracted we do find a definition of precisely this form:

- (81) *A galvanometer is an instrument for indicating the presence, strength and direction of an electric current.*

The present participle embedding has a value which is protected from interference, as it were, by the past participle embedding within which it is included.

One can explain the retention of the first stage form, then in terms of greater explicitness required of a definition: in effect it is the use of this form which meets the necessary condition for the locution to count as such. Although this explanation is a tentative one, it remains true that definitions, in scientific writing at any rate, do tend to take first stage forms, or if second stage forms those in which the embedded element is a passive construction in which the actual defining phrase is embedded, like (79) and (80).

Let us now see if we can provide any possible explanation for the fact that the embedded element in the noun phrase *the quantity measured* is not given further transformational treatment to yield *the measured quantity*, whereas in locution 4, the third transformational stage is applied to derive *a calibrated scale* from *a scale which is calibrated*. We might note in passing that in both cases the first stage forms are not the only possible ones with which these noun phrases might correspond. *The quantity measured* could correspond with *the quantity which was measured*, *the quantity which was being measured* and so on; and *a calibrated scale* could correspond with *a scale which has been calibrated* and so on.

We have already argued (8.2) that a preposed adjective has the effect of subclassifying the referent to which the noun head refers and that such a subclassification constitutes a kind of compound lexeme. This has an essentially identifying function. And here I would like to stretch the notion of identifying beyond the sense given to it in Sampson (mimeo). I should like to say that the adjective-noun construction has a basic identifying function in both definite and indefinite noun phrases. When the preposed adjective occurs in a definite noun phrase the identification relates to something specific mentioned in the previous discourse or assumed to be known as a matter of previous knowledge. When it occurs in an indefinite noun phrase it combines with the head noun to identify a member of a class or sub-class of entities which has independent existence as it were outside the immediate context of reference. If, to take a simple example, I refer to *a black cat* I am identifying a member of a sub-class of cats whereas if I refer to *a cat which is black* I am not identifying such a sub-class but am representing the blackness as a contingent fact. One might say that the adjective-noun construction in a definite noun phrase identifies a specific instance whereas in an indefinite noun phrase it identifies a sub-class.

In the passage we are considering, *the measured quantity* would imply some pre-existing entity referred to previously, some specific kind of quantity previously established. What in fact is being referred to however is quantity in a general sense covering electric current and other electrical quantities which are mentioned in the same locution, and *measured* is merely a kind of echo. In fact one might say that it really serves a sort of contact function since it is there to remind the reader which quantity is meant: it relates to the internal organization of information within the locution. It is non-referential in that it does not serve to distinguish what kind of quantity is being referred to. It is interesting to note that this second stage form is very commonly used for this kind of contact function as in expressions like *the type illustrated*, *the place indicated*, *the figure shown on p. 00* and so on. Whereas *the quantity measured* does not identify, *a calibrated scale* does. What is being referred to here is a particular kind of scale and not a scale which happens contingently to be calibrated, hence *a scale which is calibrated* will not do. Notice that if this latter form were used the most natural continuation of the discourse would be to develop the reference to calibration in something like the following way:

- (82) *The indicator usually is a pointer across a scale which is calibrated to a high degree of precision, etc.*

or perhaps:

- (83) *The indicator usually is a pointer across a scale which is calibrated. The process of calibration is necessary, etc.*

What this discussion has sought to show is that the different locutions which are outputs from the different stages of the transformational operation which grafts embeddings into noun phrases have different values as illocutions. The value of each can be associated with the degree of dependence they have: the greater the transformational treatment the more dependent does the embedded element become and the less prominent the information it expresses. Thus if the information is assumed to be already known, the embedded element goes through both deletion and transposition operations to become a preposed adjective bound to the noun head and dependent on previous reference or previous knowledge. If the information is new, then it remains incorporated into a relative clause, or if the information is of slight importance deletions are made and a stage 2 output produced. Simplifying we may say that the stage 1 output is used to move the discourse forward and has a developing function, the stage 2 output is used to fill out the discourse at the point that it has reached and has a supporting function, and the third stage output is used to link the point that has been reached with what has gone before and has a connecting function. Of course this is a generalization, and in accordance with the principle established in previous chapters of this study, these values are subject to modification as linguistic elements interrelate with others in context, and as with all rhetorical rules there is no absolute obligation to conform. But given these provisos, one may say that these three forms relate to what is going to be said, what is being said and what has been said respectively. It should be noted, however, that where there are grammatical constraints which prevent either a second or a third stage output then the characteristic function of one may be assumed by the other.

We might now check briefly to see if the passage discussed in the previous chapter (7.4) provides any substantiating evidence for these general observations. We might notice first of all that the definitions in the first paragraph make use of the full relative form (with one exception, which I shall come to presently). This is not only because explicitness might be said to be a required condition on defining but also because, as we have seen, definitions frequently serve to introduce and delimit a subject area which subsequent discourse is to deal with (7.4.2). This is consistent with the claim made above that the full relative form is used when the information referred to is being presented for further development. The exception in this paragraph is:

- (84) *The process is called electrolysis, and the two wires or plates dipping into the electrolyte are called electrodes.*

We can explain the second stage form here by pointing out that the locution in question is not independent as a definition, as is that which precedes and that

which follows, but is tied in with the immediate context. Not only is it part of a co-ordinated structure but it refers to what has been stated previously and to the diagram. The locution:

- (85) *The two wires or plates which dip into the electrolyte are called electrodes.*

hardly counts as a definition. The verb *dip*, unlike the verb *decompose* in the first locution of the passage, does not contribute any defining feature, and nothing would be lost if (85) took the form:

- (86) *The two wires or plates in the electrolyte are called electrodes.*

In fact (84) serves as a kind of parenthesis in the passage, providing additional useful names as by-products as it were of the main definition. Electrodes are defined in terms of the electrolyte previously mentioned and not in terms of the action of dipping. The fact that the information about the electrodes is included with other information within a co-ordinated locution bears out its basically subsidiary character.

The same kind of observation can be made about the following locution from the second paragraph of the passage:

- (87) *The right-hand diagram shows the two copper electrodes dipping into the copper sulphate solution contained in a glass jar.*

As has already been pointed out in the previous chapter (7.4.3), the function of this locution is to act as a commentary on the diagram. The two embedded elements therefore refer to something already evident in the context and are appropriately deleted forms. The information they provide is incidental having more of a contact than a referential function.

So far we have been concerned with embedded elements in the noun phrase and we have attempted to set up conditions which constrain the choice of one alternative form as opposed to another. What we have come up with is a general rule to the effect that the degree of transformational treatment corresponds to the degree of prominence given to the information incorporated in the underlying form concerned, and this in turn is controlled by the role this information is to play in the discourse as a whole. From this point of view, then, transformational rules can be regarded as devices for bestowing differential values on linguistic elements with the same signification and thus preparing them for use in discourse. I want now to further illustrate this rhetorical function of transformational rules by considering certain general conditions on co-ordination and adverbial transposition.

8.4. The rhetorical function of co-ordination

We will begin with co-ordination. The main task is as before. Previously we tried to establish certain general principles which would enable us to attribute different illocutionary values to the following, all of which have the general value of assertion or statement:

(88) *The man who was rude insulted me.*

(89) *The rude man insulted me.*

Now we wish to find some general principle which will enable us to distinguish between the following:

(90) *The man was rude. He insulted me.*

(91) *The man was rude and insulted me.*

(92) *The man was rude, insulting me.*

Katz and Fodor (1963) assume that it is only subordination which is relevant to semantic interpretation and that the meaning of co-ordinated elements is simply a sum of the parts. They conceive of discourse as a kind of elongated sentence:

... except for a few types of cases, discourse can be treated as a single sentence in isolation by regarding sentence boundaries as sentential connectives. As a matter of fact, this is the natural treatment. In the great majority of cases, the sentence break in discourse is simply *and*-conjunction. (In others, it is *but*, *for*, *or* and so on.) Hence, for every discourse, there is a single sentence which consists of the sequence of *n*-sentences that comprises the discourse connected by the appropriate sentential connectives and which exhibits the same semantic relations exhibited in the discourse.

(Katz and Fodor 1963: 490-1)

The justification for treating discourse as a sentence is somewhat obscure in this passage, and it is hard to see what is meant by a “natural treatment” here, but at all events it is clear that discourse in the sense defined in Chapter 4 of this study (4.1.3) cannot be considered in these terms at all. What Katz and Fodor are talking about is a semantic study of text not a pragmatic study of discourse and whatever value they may have for the development of grammar they have none for the development of rhetoric. Thus although the same semantic relations may obtain in (90), (91) and (92) they are different as illocutions: although they may be shown to have the same signification as linguistic objects, they nevertheless have different values. The question then arises: what general principle can be adduced which will enable us to distinguish these three as illocutions; how can we give substance to our intuitive recognition that they have different potentials of use in the performance of communicative acts, even though it is not easy, as we have already discovered in the previous chapter, to pin them down with a label.

The first thing to notice is that what for Katz and Fodor is “simply *and*-conjunction” is crucial in discourse since it links two elements together to form a compound unit. In (90) we have two separate propositions, two units of information, whereas in (91), although we have the same “facts” they are represented as being compounded into one unit of information, and in consequence the relationship between them is made overt. As we have seen in the previous chapter two separate locutions can inter-relate in such a way as to fulfil the conditions required for the performance of a particular illocution. But without further contextual relations the conditions might not be fully met. This is the case with (91). Since there is no explicit link between them, and since we have no other locutions available to

relate with them, this pair of locutions is open to (at least) three interpretations. The two statements may in the first place be in parallel in the sense that they offer two bits of information with no suggestion that they are related. If one wished to provide a more explicit gloss to (90) in this case, we might come up with something like the following:

(93) *The man was not only rude but he insulted me (into the bargain).*

On the other hand the two statements might have some implied connection. The insult might be thought of as evidence of the man's rudeness and in this case a suitable gloss for (90) might be something like the following:

(94) *The man was rude, as is evident from the fact that he insulted me.*

Alternatively, the man's rudeness might be represented as the cause of his insult, the insult being a consequence of the man's rudeness, and in this case we might provide a gloss:

(95) *The man was rude and consequently he insulted me.*

In each of these cases, then, we have two separate propositions which may or may not be connected. In (91), however, the connection is explicit and we have a proposition in which the two facts of the man's rudeness and his insulting behaviour are represented as one unit of information. (91) does not readily allow any of the three interpretations given above for (90). The conjoining of the two predicates combines the two facts into a compound fact so that we have one unit of information and not two. The rudeness and the insult are indeed represented as features of the same occurrence: the man was rude in that he was insulting. We may say, then, that the two predicates unite to form a compound unit in a similar way to that in which the preposed adjective combines with the head noun. It should be noticed that this compounding does not occur when the conjunction preserves the locutionary character of the elements which are conjoined. Consider the following, for example:

(96) *The man was rude and he insulted me.*

This would be the output from the transformational stage preceding that which results in (91). Here we have simply a statement that the two events referred to took place, but there is no implication that one caused the other, or that one was evidence of the other. The only interpretation of (96) would seem to be the first which was mentioned earlier. When deletion takes place, however, the two events are drawn into a mutual dependency to form a compound predicate. Thus we see that the general rule about transformational treatment holds in this instance of co-ordination. At the first stage, which has (96) as output, the locutions lose their independence to the extent that their inter-relationship yields one value rather than three. At the second stage, at which deletion takes place to yield a locution with a conjoined predicate, dependence is increased further in that what was previously represented as two separate events, or facts, is now represented as one compound one. To put it simply, (96) is about the man's rudeness and about

his insulting behaviour, whereas (91) is about his rude insult or his insulting rudeness.

The illocutionary difference between (91) and (96) is not an easy one to formulate, but a further example might serve to make it a little clearer. Consider the following:

(97) *Hamish is wealthy and he lives at Dalgety Bay.*

(98) *Hamish is wealthy and lives at Dalgety Bay.*

In the absence of any contextual conditioning, which, in accordance with the principle established in Chapter 7 might of course neutralize the distinctions we are making here, we may say that (97) as an illocution is a statement about two facts: that Hamish is wealthy and that he lives at Dalgety Bay. There is no indication that these two facts are related in any way. In (98), on the other hand, the two facts are shown to be related: Hamish's wealth is represented as having something to do with the fact that he lives at Dalgety Bay. The conjoined elements combine to form a compound proposition. Notice, however, that both facts are presented as new information and in this respect the conjoined elements have equal prominence. If we wished to give one of them greater prominence and the other a correspondingly smaller prominence, then further transformational treatment would be required. Thus we might wish to give greater prominence to the second of the elements, and we would do this by applying a mutation transformation to yield the following:

(99) *Being wealthy, Hamish lives at Dalgety Bay.*

This is a statement about Hamish's place of residence and the fact that he is wealthy is carried over from previous discourse, or assumed to be known already by virtue of knowledge of the world. The first element in other words is given, and as such acts in a supporting role in the statement. If one wished to make a statement about Hamish's wealth, on the other hand, and to give subsidiary status to the fact expressed in the second of the conjoined elements, then one could apply the transformational rule differently to yield an output like the following:

(100) *Hamish is wealthy, living at Dalgety Bay.*

These observations would appear to bear out the general rule that as transformational treatment reduces the locutionary independence of a linguistic element, so that element develops a dependence on others within and beyond the locution in which it appears, and the information it expresses is given less prominent status. I do not mean by this that such information is unimportant or peripheral (though sometimes it may be) but that it is represented as a supplementary part of the other co-ordinated element.

8.4.1. Sequence and concomitance

As further illustration of this inter-dependency, we might consider how co-ordinating transformations are used in the description of a number of actions or events. As has already been suggested (8.3.3; 8.3.4), one way of regarding syntactic structure is to consider it as the means whereby a linear and one-dimensional

presentation of information is provided with the dimensions of relative significance. In a similar way we can regard it as a means of organizing time reference and freeing it from the sequence suggested by linear arrangement of language. Consider the following:

(101) *Basil went to the window. He lit a cigar.*

(102) *Basil went to the window and lit a cigar.*

In the first of these, Basil's activities are represented as two separate events, and for all we know there may have been some passage of time between his arrival at the window and his lighting of his cigar. In (102) the two actions are represented as one event, although in this case of course the two facts described are not such as to imply the kind of relationship discussed in connection with (91) and (98). It is sometimes suggested that the conjunction *and* has a variety of different meanings. The view I should like to adopt here is that it is simply an indicator that what is conjoined is to be regarded as one unit of information, and the internal relationships which are set up within this unit will depend on the nature of the conjoined elements, the value of the unit as a whole being a function of the inter-relationship of its elements, according to the notions discussed in Chapter 6. The conjunction is simply an indication that such inter-relations exist.

In (102), then, we have one proposition expressing one unit of information compounded of two facts. Within this unit there is a relation of ordering between the two constituent elements such that what is referred to in the first is represented as occurring before that which is referred to in the second. Hence the following means something quite different:

(103) *Basil lit a cigar and went to the window.*

If we now apply the next stage of the transformational process, however, one of the co-ordinates becomes prominent and the other attaches to it and as it does so the change in syntactic structure involves a corresponding change in the structure of the information. We no longer have two activities in sequence constituting one event but two simultaneous activities. For example:

(104) *Basil lit a cigar going to the window.*

(105) *Basil went to the window lighting a cigar.*

Here the going to the window and the lighting of the cigar are represented as happening at the same time. And this simultaneity is preserved no matter which of the co-ordinated elements is transformationally treated and no matter in which order they are presented. Thus the time relationship between the two activities is the same in (104) and (105) as in the following:

(106) *Going to the window Basil lit a cigar.*

(107) *Lighting a cigar Basil went to the window.*

We might notice in passing that (106) and (107) seem more acceptable than do (104) and (105), and this has to do with conditions on transposition which I shall refer to later and which will lead us to possible ways of distinguishing between the above as illocutions. For the present, however, we need only to note

that in all four cases the event is represented as consisting of two simultaneous actions and not, as is the case with (102) and (103) of two consecutive ones. The time reference of the element which has received transformational treatment becomes that of the element to which it relates. As with the elements embedded in the noun phrase which were discussed earlier, the *-ing* form here takes on the value of the element with which it combines. Notice that the following are possible:

(108) *Going to the window Basil lights a cigar.*

(109) *Going to the window Basil will light a cigar.*

The use of this kind of co-ordination is very common in the technical description of processes. We might consider the following for example:

(110) *A great deal of extra heat is given off by the reaction, making the inside of the tube glow.*

(111) *Nitrogen oxide dissolves in water, forming a mixture of nitrous and nitric acids.*

Here we have two simultaneous occurrences, as in the case of the locutions concerning Basil previously cited, but the two occurrences are not only bound by a common time reference but also by a logical relationship which is the function of the combined values of the two co-ordinate elements. In this respect, (110) and (111) are similar to (98), (99) and (100). It is in fact generally the case that when this kind of co-ordination is used in technical writing it is to establish not only the simultaneity of what each co-ordinate describes but also some logical relationship between them. In other words we do not simply get an observational account of simultaneity but a rational account of concomitance. Thus, for example, in (110) it is not simply that the tube glows at the same time as the extra heat is given off, but the second event is a concomitant of the first. The same relation is expressed in (111): the two processes not only occur simultaneously but one is a natural and necessary concomitant of the other.

Let us consider other examples:

(112) *The sand is now added and rammed, forming the top half of the mould.*

(113) *The moulding box is now inverted on the moulding board, exposing the pattern face in the sand.*

(114) *Patterns likely to be used repeatedly will have a screwed end, avoiding damage to the pattern.*

The relationship of concomitance can be made explicit by the insertion of *thereby*, as, for example, in:

(115) *The sand is now added and rammed, thereby forming the top half of the mould.*

etc.

What must be noticed here is that, as with the case of embeddings in the noun phrase, the outputs from later transformational treatment have an increased dependency on the elements with which they are associated in the locution and a

correspondingly more tenuous link with any putative deep structure from which they derive. That is to say, the value assumed by the element concerned is derivable from its syntagmatic association with other elements in context rather than from its paradigmatic association with elements which have the same signification in the code. It was pointed out previously that the value of compound nominals is commonly derivable from context rather than from code relations. Consider the following, for example:

- (116) *The engineer uses gases which burn at a high temperature for cutting metals. The best known of the fuel gases are acetylene, hydrogen and propane.*

Here the value of *fuel gases* is not to be derived by setting up a paradigmatic equivalent after the manner of Lees (1960) like *gases which are used for fuel*, but by recognizing the contextual equivalent: *gases which burn at high temperature*.

Similarly, the value of the *-ing* form co-ordinates we have been considering is a function of the relationship between the co-ordinate and other elements in context. For example, we might suggest the following as an output from an earlier stage of the transformational operation which ultimately yields (113):

- (117) *The moulding box is now inverted in the moulding board and it exposes the pattern face in the sand.*

But since the exposing of the pattern face is entailed by the inverting of the moulding box, the value of the *-ing* form here is not captured by this alternative version. What we need is something of the following kind:

- (118) *The moulding box is now inverted in the moulding board and the inversion of the moulding box in the moulding board exposes the pattern face in the sand.*

or perhaps:

- (119) *The moulding box is now inverted in the moulding board and as the moulding box is inverted in the moulding board it exposes the pattern face in the sand.*

Or perhaps other versions. Notice that in the case of (118) we no longer have the necessary conditions for equi-NP deletion so other rules would have to be postulated to derive (113) from it. Notice too that an intermediate output between (118) and (113) would be not (117) but

- (120) *The moulding box is now inverted in the moulding board and this exposes the pattern face in the sand.*

We might compare the following as further illustration:

- (121) *In practice, the molten metal chills quickly on contact with the mould walls, while the inner mass cools slowly, and this gives two quite different structures.*

- (122) *In practice, the molten metal chills quickly on contact with the mould walls, while the inner mass cools slowly, giving two different structures.*

It would appear then that like the adjective-noun constructions we discussed earlier (8.3), the *-ing* form co-ordinate can be seen to be derived from a number of different deep structures, and that which is relevant in any particular instance will depend on the relationship between the element concerned and others in the context. The transformational rules which yield such a form can therefore be seen as a device for releasing it from a dependence on any particular deep structure relation so that it may take on whatever value is required by the context in which it appears. The deep structure is any way only recoverable, as in the case of (118), by reference to this context and is in effect a reformulation of the value of the element concerned as a kind of *ad hoc* signification (cf. 5.1.1.)

8.5. The rhetorical function of adverbial transposition

I have said that the *-ing* form co-ordinate we have been considering can be related to a number of necessarily more explicit earlier transformational outputs. Reference to some of these will lead us to take up the question of general conditions on adverbial transposition and the way in which this too illustrates the rhetorical effect of transformational operations. Consider the following:

- (123) *Sulphur burns in the air with a pale blue flame, forming the gas, sulphur dioxide.*

As with the examples we have previously considered, there is a relationship of concomitance between the two co-ordinates here. It is not simply that the formation of the gas occurs at the same time as the burning of the sulphur: the former is a direct consequence of the latter. If we wished to make this more explicit we could rewrite (123) in the form of what we might assume to be an earlier transformational version, such as:

- (124) *Sulphur burns in the air with a pale blue flame so as to form the gas, sulphur dioxide.*

Alternatively we might prefer the deleted, and consequently less explicit form:

- (125) *Sulphur burns in the air with a pale blue flame to form the gas, sulphur dioxide.*

The difficulty here, as we have seen with previous examples in this chapter, is that by making explicit what is only implied in (123) we alter the rhetorical value of the statement. The fact that sulphur dioxide is formed now takes on greater prominence and ceases to be, as it is in (123), simply an incidental observation and in consequence the statement is principally about the formation of the gas rather than about the burning of the sulphur. There is a change, we might say, of referential focus. Again we see how deletion and mutation transformations operate to create variations in value. Let us now consider transposition.

(123) provides us with the necessary structural conditions for the application of a transformational rule which will transpose the *-ing* clause to initial position to produce the following:

- (126) *Forming the gas, sulphur dioxide, sulphur burns in the air with a pale blue flame.*

Here, however, the value has changed even more radically. Whereas in (123) the implication is that the formation of the gas is an effect of the burning of the sulphur, in (126) the implication is, at least on one interpretation, that the burning of the sulphur in the air with a pale blue flame is a consequence of the fact that sulphur dioxide is formed. In other words, the cause/effect entailment is reversed. To make this implication explicit we would have to postulate a different deep structure for (126) from that underlying (123) and in this case an earlier transformational version would be something like the following:

- (127) *Since sulphur forms the gas, sulphur dioxide, it burns in the air with a pale blue flame.*

But this is not the only possible implication which an earlier transformational output might make more explicit. One might also postulate the following as an alternative version:

- (128) *When sulphur forms the gas, sulphur dioxide, it burns in the air with a pale blue flame.*

or:

- (129) *While sulphur forms the gas, sulphur dioxide, it burns in the air with a pale blue flame.*

and perhaps others.

In the case of the particular locutions (123) and (126) then, it would appear that transposition has the effect of changing meaning to the extent of requiring different deep structures if one is to account for the difference in grammatical terms, and this task is complicated to the point of impossibility because there is no way of knowing which deep structure is in fact required. Furthermore, it is difficult to see how a general grammatical rule can be postulated since in other cases transposition does not have the same effect. Consider, for example, the following pair of locutions:

- (130) *Jane closed the curtains, seeing a man outside the window.*

- (131) *Seeing a man outside the window, Jane closed the curtains.*

In both cases the closing of the curtains comes as a consequence of Jane's seeing the man outside and the cause/effect entailment is unaffected by transposition (although this does not mean that in other respects the value of each locution is the same). We might compare those locutions with the following:

- (132) *Albert arrived late, missing the bus.*

- (133) *Missing the bus, Albert arrived late.*

Here the entailment is reversed as in (123) and (126). In (132) the implication is that Albert missed the bus because he arrived late and in (133) the implication is that Albert arrived late because he missed the bus.

It would appear, then, that transposition transformations, like those of deletion and mutation, have the effect of releasing the linguistic element concerned from its connection with a specific signification as represented by a deep structure so that it may take on the value required by the context of the locution in which it appears and by the larger context of discourse of which that locution forms a part. But although it is difficult to see how grammatical rules might be formulated to account for the variable value of such elements, it is possible, as in our discussion of other transformational operations, to suggest certain general rules of a rhetorical kind which appear to constrain transposition.

8.5.1. *Expansion and setting*

As before, our task is to adduce some general principle whereby we may associate a type of transformational operation with a broad rhetorical function. To put the matter simply, we are interested in discovering whether the transposition of adverbial elements has some general communicative purpose of which the instances we have cited above are particular cases. Although, as has been pointed out, the effect of transposing varies greatly from a radical change in “cognitive” meaning, as in the case of (132) and (133), to a change which one might describe as one of emphasis or focus, as in the case of (130) and (131) (and also of Basil and his cigar – (106) and (107)), it should nevertheless be possible to make some general statement which covers the phenomenon as a whole and which might serve as a basis for a more refined account.

We will begin by repeating the crucial, if obvious point that the interpretation of any linguistic element in a discourse is dependent on what has preceded. This is simply to say that it is an ongoing process whereby value is recognized by relating one piece of language not only to the code but also to the foregoing context. In certain types of writing, of which poetry is the most obvious instance, value may also be a function of the relationship between a linguistic element and elements which follow: in this case it may be that the value of the element cannot be recognized until it is placed in the context of the completed discourse. Generally speaking, however, we may say that it is previous discourse which provides the necessary conditions for the assignment of value, and that our understanding of a linguistic element in its communicative function derives from our recognition of how it relates to what has gone before. We have already seen how this principle operates in the case of noun phrases and adverbials, and how it provides ambiguity with a rhetorical justification. In simple terms, then, the principle is that what precedes serves to condition what follows. It is, of course, a corollary to Bolinger’s notion of linear modification (Bolinger 1952/1965) which was discussed previously in this chapter (8.2), but extended to apply not just to elements in a sentence (which as argued earlier, has no special status as a unit of communication) but to the way discourse as a whole is organised.

If we apply this principle to the transposition of adverbial elements, we may say (tentatively) that the effect of transposing is to move the adverbial from a position in which it is conditioned by what has preceded in the locution to one in which it does the conditioning itself. Thus in the case of (123) the fact that sul-

phur dioxide is formed is conditional on the sulphur burning: the sulphur burns in the air with a pale blue flame and incidentally produces the gas. In (126), however, the fact that sulphur burns in the air with a pale blue flame is not absolute in the same way: it does so under the conditions represented by the preposed adverbial. So that whereas in (123) we have a statement about sulphur with an *expansion* which depends upon it, in (126) we have a statement which is provided with a *setting* which represents the conditions under which the statement's validity or relevance is to be assessed. In other words, the effect of transposing the adverbial is to shift it from a position in which it represents simply an expansion of the main proposition to one in which it represents a setting which changes the value of the proposition itself, and is, as it were, an intrusion into the locution of conditions provided by the previous discourse as a whole. The preposed adverbial becomes a part of the whole setting of the preceding discourse which provides the conditions under which the value of the locution concerned is to be assigned.

When the adverbial is preposed, then, it relates with the proposition so as to provide the locution with a value other than that which it has when the adverbial remains in untransposed position; it provides a setting with reference to which the main proposition which follows is to be understood. It provides, as it were, a rhetorical priming. One might in fact say that the effect of transposing is to remove the adverbial from the proposition itself to become one of the features of the discourse setting in the light of which the proposition is to be interpreted. As we have seen, the effect on the value of the proposition varies considerably, but even where it is slight it remains, I think, perceptible. Thus in (130) and (131), for example, the former has rather an odd ring to it because although we understand that Jane's seeing of the man outside caused her to close her curtains the position of the adverbial suggests that this is only incidental information.

Although this discussion has been concerned with *-ing* form adverbials, I think that it is likely that the effect of transposition applies generally to adverbial elements as a whole. Adverbials are, of course, a notoriously difficult category to deal with (see Lyons 1966a; Greenbaum 1969, etc.) and it is by no means clear what their grammatical function is. Part of the difficulty has, I believe, arisen from attempts to account for them within the limits of the sentence in terms of deep structure. But if it is the case that transformations convert "clause" adverbials, which are attached to the proposition, to "sentence" adverbials, which are outside it, as I have been suggesting, then it is difficult to see how the nature of the adverbial can be captured in those terms. If one takes the view adopted here, it is possible to think of adverbials as taking on the general value of expansion or setting according as to whether they have been moved by a transposition transformation or not. We are not committed, as the grammarian is, to fixing them with a specific signification as a code element.

Since the transposed adverbial is taken out of the proposition and associated with preceding discourse as a setting in the light of which the proposition is understood, it naturally ranges over the whole locution in which it appears, and sometimes over subsequent ones as well. As has often been pointed out, in other

words, preposing an adverbial extends its scope. Consider the following, for example:

- (134) *When very small castings are being produced, each shot may produce several identical castings, or may produce a set of castings.*

Here the preposed adverbial clause of time provides the setting for all that follows. If the clause is not preposed it attaches to the immediately preceding proposition as an expansion. Thus we get either of the following:

- (135) *Each shot may produce several identical castings when very small castings are being produced or may produce a set of castings.*

Here there is no indication that it is when very small castings are being produced that each shot may produce a set of castings. The second proposition does not come within the influence of the adverbial. Alternatively, the adverbial may be placed at the end of the locution to yield:

- (136) *Each shot may produce several identical castings, or may produce a set of castings when very small castings are being produced.*

In this case, on the other hand, it is the first proposition which is left unaffected and there is no indication that it is when very small castings are being produced that each shot may produce several identical castings. Only when the time clause is preposed does its influence extend over both propositions. The same observation can be made about other kinds of adverbial clause like *if* clauses and *although* clauses. They too illustrate the general change of value from expansion to setting which transposition brings about and the increase in scope of which this is a necessary consequence.

In this chapter I have been concerned with establishing certain general rhetorical functions of transformational operations. What I have attempted to illustrate is that although from a grammatical point of view transformational rules are regarded as the means whereby different surface forms can be related to a common deep structure which represents their common signification, from the rhetorical point of view they can be regarded as rules of performance whereby linguistic structures are provided with the different illocutionary values required for them to become communicative units in discourse. The suggestion is that transformational rules provide us with a way of characterising different communicative acts for which we have no distinguishing terms. If the suggestions that have been made have any validity, they clearly point to a whole area of research, which it is beyond the limits of this study to explore. Meanwhile it is possible to consider what implications the approach to discourse analysis that has been outlined in this and the preceding chapters might have for further developments in linguistic description on the one hand and for the teaching of language as communication on the other. These are discussed in the two chapters which follow.

CHAPTER 9

THEORETICAL PERSPECTIVES

9.1. Basic principles

What I want to do in this chapter is to present a restatement of the basic theoretical point of view which underlies the detail of the preceding discussion and demonstration. I shall do this by attempting to place the approach that has been adopted in a wider perspective and to show how it relates to other approaches to discourse analysis. The next (and last) chapter will aim to show how the insights it provides can be exploited for pedagogic purposes.

In spite of the obvious differences in theoretical orientation, the work of Halliday and his associates is similar to that of the generative semanticists reviewed in Chapter 5 in one respect: both make the assumption that the communicative functioning of language can be accounted for in terms of formal properties. In both cases the way language is used is referred to the operation of the language system, and discourse is represented as exemplifying grammatical categories of one kind or another. Halliday's early attempts to account for language use (Halliday, McIntosh and Stevens 1964) are exercises in correlation: structural elements at the levels of substance and form are simply related with what Crystal and Davy (1969) call "dimensions of situational constraint". In his recent development of "functional" grammar, Halliday incorporates these social factors within the grammatical system itself. Thus in Halliday (1973) the ideational, modal and textual components of the grammar are represented as projections from field, style and mode of discourse respectively (cf. 3.3.1-3.3.2). As Halliday himself acknowledges, his approach to linguistic description necessarily involves the rejection of the *langue/parole*, competence/performance distinction. As he puts it, linguistics for him is concerned

...with the description of speech acts, or texts, since only through the study of language in use are all the functions of language, and therefore all components of meanings, brought into focus. Here we shall not need to draw a distinction between an idealized knowledge of a language and its actualized use: between 'the code' and 'the use of the code', or between 'competence' and 'performance'. Such a dichotomy runs the risk of being either unnecessary or misleading: unnecessary if it is just another name for the distinction between what we have been able to describe in the grammar and what we have not, and misleading in any other interpretation.

(Halliday 1970 :145)

It is obvious that features of language use like presupposition and focus and illocutionary force which, as we have seen in Chapter 5, generative grammarians have attempted to incorporate into the deep structure of sentences, correspond to various "options" which Halliday would account for in his textual and interpersonal components. As has already been pointed out, such attempts have the effect of effacing the competence/performance, sentence/utterance distinction, though, unlike Halliday, the generative grammarians have nowhere (to my knowledge) openly acknowledged the fact.

These attempts to draw features of discourse within the scope of grammatical description, then, involve removing the distinction between a knowledge of the language system and the procedures which the language user follows in putting this knowledge to use in actual acts of communication. In consequence, discourse is represented as consisting of a combination of pre-established meanings, as a set of tokens of types already set up within the code of the language. What seems to me is left out of account in such a concept of language use is the essential on-going creativeness of communication. If language use were simply a realization of pre-existing knowledge, it is hard to see how it could serve in the exploration of experience and the acquisition of knowledge, or, indeed, how the phenomenon of language change could possibly be explained.

Generative grammarians have frequently made the point that we acquire a knowledge of our language at a very early age. This may be true in relation to knowledge of the language system in its phonological and syntactic essentials, but in relation to use we never can acquire a knowledge of the full communicative potential of this system (see Bernstein 1971). As we have seen (6.5.3), different uses of language in such widely differing fields as cooking and chemistry require lexical items to take on new semantic value and any new experience is likely to require a modification of the categories of previous knowledge. This, presumably, is how we learn.

It seems to me that a satisfactory approach to the description of discourse must recognize that it creates its own meanings by intra-textual modification, that it generates its own internal development. In addition to his knowledge of the language system, therefore, the user has certain strategies at his disposal which enable him to recognize the communicative value of linguistic elements as they occur mutually conditioned in context.

9.2. Comparisons and correspondences

This kind of perspective on discourse and the approach to analysis which it indicates, and which I attempted to outline in Chapters 6-8 of this study, is, as I hope to show in the following chapter, of particular relevance to language teaching and so represents the kind of insight which the applied linguist can exploit. Before considering the practical application of such an approach, however, I want to try to make clear what it aims to account for by relating it to the ethnomethodologists' approach to discourse analysis as exemplified in such work as Garfinkel (1967, 1972), Sacks (1972), Schegloff (1971), and to other approaches with which it appears to invite comparison.

9.2.1. Ethnomethodology

The basic contention of the ethnomethodologists is that discourse proceeds not on the basis of shared previous knowledge of the participants, a simple matching of token and type, but as a "contingent ongoing accomplishment" (Garfinkel 1972: 309) whereby meanings are constructed by the participants in particular contexts. Language users are in possession of certain interpretative procedures or rules which they apply as a discourse proceeds to make sense of what is being

said. Meanings are not recognized by reference to a pre-established code but must be discovered, and it is the way in which they are discovered, in my terms how value is established, that is of principal interest to the ethnomethodologists. The emphasis is on operation. As Garfinkel puts it:

For the conduct of their everyday affairs, persons take for granted that what is said *will be made out* according to methods that the parties use to make out what they are saying for its clear, consistent, coherent, understandable, or planful character, i.e., as subject to some rule's jurisdiction – in a word, as rational. To see the “sense” of what is said is to accord to what was said of its character “as a rule”. *“Shared agreement” refers to various social methods for accomplishing the members’ recognition that something was said according to a rule and not the demonstrable matching of substantive matters. The appropriate image of a common understanding is therefore an operation rather than a common intersection of overlapping sets.*

(Garfinkel 1967: 30)

We may paraphrase this using terms employed in this study by saying that communication does not take place simply by reference to a shared code whereby participants match linguistic elements with their signification. There must be some procedure whereby the participants realize what linguistic elements count as in terms of value, and such procedures are applied *ex tempore*, as it were, within the discourse itself. Discourse develops from within and is controlled by the process of interpretation:

Thus, a leading policy is to refuse serious consideration to the prevailing proposal that efficiency, efficacy, effectiveness, intelligibility, consistency, planfulness, typicality, uniformity, reproducibility of activities – i.e., that rational properties of practical activities – be assessed, recognized, categorized, described *by using a rule or a standard obtained outside actual settings within which such properties are recognized, used, produced, and talked about by settings’ members.*

(Garfinkel 1967: 33; my emphasis)

The attempts to account for discourse in terms of the exemplification of previously established formal rules, which were reviewed earlier in this study (see, in particular Chapter 5), represent the kind of activity to which Garfinkel refuses serious consideration since it amounts to the imposition of rules and standards obtained outside actual settings. For the ethnomethodologists, descriptive categories must be members’ categories which are set up as a consequence of “practical reasoning”: the analyst does not describe the structure of discourse from a detached observer’s point of view but accounts for its development in terms of the strategies which participants use to develop it.

The difference between the approach to discourse analysis adopted by grammarians and that adopted by ethnomethodologists might be illustrated by comparing Dressler (1970) with Sacks (1972). Both are concerned with the question of how sentences (i.e. locutions in the sense of 6.3) in sequence are produced and perceived as making up a coherent discourse.

9.2.2. Deep structure in discourse: Dressler

Dressler cites the following as an instance of discourse:

- (1) *I walked through a park. The trees were already green. In a beech there was a beautiful wood-pecker.* (Dressler 1970: 205)

Dressler observes that there is no overt grammatical connection between these sentences. That is to say, using the terms introduced in Chapter 4 (4.1.3), there is coherence without cohesion. What is it then that creates the coherence? Dressler comments:

This is a well-formed discourse because of semantic coherence or more precisely because of semantic anaphora which holds between the semantic components of the lexical items 'park' 'tree' 'beech'. (Dressler 1970: 205)

What the ethnomethodologist would (presumably) say about this account is that Dressler has noticed a certain linguistic relation between the lexical items referred to and has assumed that this must explain the coherence he is looking for. What remains unexplained, however, is *how* this anaphora is recognized. One can point out that the lexical items in question have certain components or features in common in their specifications in the dictionary, or that there is a relation of metonymy between *park* and *tree* and one of hyponymy between *tree* and *beech*. But how does one recognize these relationships as relevant in this particular discourse? How does it come about that our recognition of the semantic link between these items as code elements leads us to recognize that the locutions in which they appear function as parts of one discourse? In fact, a moment's reflection makes it clear that a knowledge of the semantic links between those lexical items cannot of itself explain the coherence of the passage that Dressler cites. In the first place, one has to select these items as the relevant ones, as opposed to, say, *park*, *green* and *woodpecker* between which relationships could also be established by reference to semantic components. Secondly, it seems clear that if coherence does have something to do with the lexical items Dressler picks out then it must also have to do with the order in which they occur. If, for example, one re-ordered the sentences to read:

- (2) *In a beech there was a beautiful woodpecker. The trees were already green. I walked through a park.*

the discourse ceases to be well-formed. One still recognizes the semantic links, but they appear now to lose their anaphoric effect. Does semantic anaphora depend, perhaps, on certain conditions such as, for example, that the first lexical item must stand in a certain sense relation to the second? We might suggest, for instance, that the second two of Dressler's locutions cohere because the second lexical item (*beech*) stands in hyponymic relation to the first (*tree*). But if we were to do this, and to propose it as a general condition on semantic anaphora, then one would have to say that the following does not constitute a coherent discourse:

- (3) *I walked through a park. A beech spread its great branches to the sun. The trees were already green.*

And there would be innumerable other instances where the hyponym precedes the superordinate term and yet where the resultant combination of locutions does not make for a malformed discourse in any obvious way. In the in-

stance just cited it seems obvious that the link between the second two locutions has to do with the relationship between *branches* and *green* as well as between *beech* and *trees*. But again, how do we recognize the relevance of this relationship, and what are the conditions on its functioning as a cohesive device? It is not enough to point to shared semantic features: one has also to explain why these particular semantic features in this particular order should function anaphorically.

There is a third reason why Dressler's account of coherence in this short discourse might be said to lack explanatory adequacy. If one says that the discourse is coherent because of the semantic anaphora holding between the lexical items mentioned, then one is presumably committed to the corollary that if semantic links are missing, then there is no well-formed discourse. Here we come to the heart of the discourse problem as the ethnomethodologists see it: because such an approach to the description of discourse ignores the possibility that semantic links may be created within the context and not simply recognized as obtaining in the linguistic code. Let us, for example, remove one of the lexical items upon which, according to Dressler, the coherence of the discourse depends and let us replace it with one which has no obvious semantic association with the other two. Let us replace *park* with *streets* as follows:

- (4) *I walked through the streets. The trees were already green. In a beech there was a beautiful woodpecker.*

Now although it is reasonable to say that *park* and *trees* are semantically related in the language code in that somewhere in the dictionary entry for the former there will be some reference to the fact that it is of the nature of parks to contain trees, there will presumably be no reference to trees in a dictionary entry for *street*. How then do we account for the fact that an utterance of the first two of the above locutions (I will come to the third presently) constitute a possible discourse, as I suppose everyone would agree that they do? It does so, I suggest, because the reader *creates*, and the writer counts on him creating, the links which are necessary for the two locutions to make sense as discourse and makes an *ad hoc* semantic connection between *streets* and *trees*, even though such a connection will not be part of his previous knowledge of the code.

The reader proceeds by first making the basic language-users' assumption that locutions are not being cited (i.e. are not related to sentences) but used (i.e. are related to utterances) and that what another language-user says or writes is intended to be interpreted. He assumes that people who produce language are not deranged, or practising a deception, or conducting an experiment, but are doing so for some communicative purpose. In short, he will be predisposed to *make* sense of a piece of language. In the present case he is confronted with two statements, the first referring to streets and the second to trees, and he will suppose that since the statements follow each other they are intended to be linked into a coherent discourse and so he will link the two lexical items and conclude that the trees referred to in the second statement must be present in the streets referred to in the first. By this process of what the ethnomethodologists call "practical reasoning" he will conclude that the streets are tree-lined, or at least that they have trees near at hand somewhere. We may say, using the terms introduced elsewhere

in this study, that the lexical item *trees* has acquired a specific value in this context such that its use refers to trees lining streets, urban rather than rural trees.

We may now turn to the third locution cited above. We now notice that the common semantic components of *trees* and *beech* no longer serve an anaphoric function and that there is now an absence of coherence between the second and third locutions, or at least they do not unequivocally form a well-formed discourse. There is an oddity. This arises because the reader has already identified the trees referred to as urban by associating them with streets and he is now required to identify them as rural, that is supposing that woodpeckers are not a normal feature of cities. Thus the effect of creating a semantic link in context between items not linked in the code is to break the link between items whose semantic relationship in the code might otherwise contribute towards coherence. Of course the reader will still attempt to connect up this third locution with those which have preceded on the assumption that the three of them are intended to be interpreted in relation to each other. The difficulty he has in doing this will presumably be a measure of the degree of well-formedness of the discourse. We are all along assuming, of course, that we are dealing here with the “completed” discourse – a kind of imagist prose poem, or an entry in a diary, perhaps. If it is part of a larger piece of language use then the reader’s reasoning will operate on what has preceded and what follows (see Chapter 7).

I have pointed to certain possible shortcomings of Dressler’s approach to discourse analysis, as exemplified in his account of the three-part discourse cited above. Essentially, the problem seems to be, as was demonstrated in Chapter 5, that the grammarian sees discourse as having a definite structure which is the projection, as it were, of rules which the language user is constrained to apply as a condition on his communicating at all. He does not see it, as the ethnomethodologists appear to see it, as a process whereby the language user resorts to certain strategies to apply his previous knowledge, or, to put it another way, where the language user has a knowledge of rules of application as well as a knowledge of rules relating to the language system. What form such rules of application might take is illustrated in the work of Sacks, to which we now turn.

9.2.3. *Devices and application rules: Sacks*

Whereas in Dressler (1970) we have three invented locutions in Sacks (1972) we have two actually attested utterances. They are:

- (5) *The baby cried. The mommy picked it up.*

Like Dressler, Sacks too is interested in finding out how it is that a reader/hearer with a knowledge of English will understand this as a coherent discourse and not just as two sentences. Dressler would presumably account for coherence here in terms of shared semantic features of the two lexical items *mommy* and *baby*. But this lacks explicitness in the sense that it does not explain how we understand that it is the baby’s mother and not some other mother that does the picking up. Sacks sets out to provide what he calls an “apparatus” which will account for this understanding, and for the fact that these two utterances are heard as referring to consecutive events and thereby constitute a “possible description”

for “members” – that is to say for members of a speech community sharing a knowledge of a language and of the rules of ways of speaking by means of which this knowledge is put to social use. Members recognize that the production of the utterances cited above counts as a “possible description”. How, then, can this recognition be characterized? As Sacks puts it:

What one ought to seek to build is an apparatus which will provide for how it is that any activities, which members do in such a way as to be recognizable as such to members, are done, and done recognizably.

(Sacks 1972: 332)

Essentially what this apparatus consists of is a set of categorization devices representing members’ social knowledge together with certain rules of application whereby these devices are matched with actual instances. In other words, (if I understand Sacks correctly) members of a society have categorized the world in a certain way and their categories have been grouped into sets which make up a device. When they interpret a use of language as an activity like a description they match a category from a device with an instance of that category in the actual discourse. Put another way, they recognize a token of a category type, and they do this by means of rules of application. There is, for example, a collection of categories which has the device “family” and this consists of categories like “baby”, “mommy”, “daddy” and so on. When *baby* occurs in discourse it is understood as referring to a particular baby in the population by means of a rule of application which states that:

If a member uses a single category from any membership categorization device, then they (*sic*) can be recognized to be doing *adequate reference* to a person.

(Sacks 1972: 333)

That is to say, it is not necessary, according to Sacks, to draw on more than one category in order to refer to a person. This rule accounts for *baby* being an adequate reference. There is no need to draw on other categories, like, for example, those of “male” and “female” in the categorization device “sex”. By the same token, adequate reference can be made by using just one category from this device, so that *he* and *she*, presumably, would be counted as adequately referring expressions. It is not clear to me how the term “adequate reference” is intended to be understood, nor, indeed, how the members’ categories of social knowledge relate to the semantic structure of the language. I shall return to this question later.

Meanwhile we have another application rule to consider. This is referred to by Sacks as “the consistency rule” and runs as follows:

If some population of persons is being categorized, and if a category from some device’s collection has been used to categorize a first member of the population, then that category of other categories of the same collection *may* be used to categorize further members of the population.

(Sacks 1972: 333)

What this appears to mean in relation to the discourse we are considering is that if *baby* has been categorized as being a member of the “family” device, then

mommy may be categorized as being a category from the same device. Sacks then introduces a corollary to this rule, which he calls a “hearer’s maxim”:

If two or more categories are used to categorize two or more members of some population, and those categories can be heard as categories from the same collection, then: Hear them that way. (Sacks 1972: 333)

The point is that *baby* is also a category from what Sacks calls a “stage of life” device, which would also include such categories as “child” “teenager” “adult” and so on. Assuming that *mommy* might also be a category of a different device from “family”, the hearer’s maxim provides for both *baby* and *mommy* being recognized as from the same device, and this ensures that *baby* is heard as belonging to at least the “family” device, so the potential ambiguity of its occurrence is avoided.

Sacks then turns to the problem of how *baby* and *mommy* are understood to be related (in the literal sense), of how we take it that the mommy referred to is the baby’s mommy and not some other mommy. To resolve this problem he introduces the concept of a “duplicatively organized” device. Such a device is one whose collection of categories defines a unit of some kind, like a team or a family. He then introduces a further application rule to the effect that if members of a population (i.e. *baby* and *mommy* in our particular discourse) are categorized as categories from a duplicatively organized device, then they are understood to belong to the same instance of that unit which is defined by the device. Since “family” is a duplicatively organized device, and since “baby” and “mommy” are categories of that device, then the baby and the mommy in our discourse are understood as being from the same family. Or, as Sacks puts it:

If some population has been categorized by use of categories from some device whose collection has the ‘duplicative organization’ property, and a member is presented with a categorized population which *can be heard* as ‘coincumbents’ of a case of that device’s unit, then: Hear it that way. (Sacks 1972: 334)

The next question to be taken up is how *baby* is understood as belonging to the “stage of life” device as well as to the “family” device. After all, a mother can refer to her child as “her baby” even when the child in question has grown beyond the stage of being a baby as such. Here Sacks introduces the notion of “category-bound activities”, that is to say activities which are taken to be specifically associated with certain categories. Thus crying is an activity which is bound to babies, as is evident from the fact that when it is associated with other categories in the “stage of life” device it is understood as being censorious in some way, as in the expression “cry-baby” applied to an adolescent. We now have another “hearer’s maxim” to the effect:

If a category-bound activity is asserted to have been done by a member of some category where, if that category is ambiguous (i.e. is a member of at least two different devices) but where, at least for one of those devices, the asserted activity is category bound to the given category, then hear that *at least* the category from the device to which it is bound is being asserted to hold. (Sacks 1972: 337)

It is evident from this brief survey of (part of) Sacks' analysis that it attempts to provide a much more explicit account of how pieces of language are actually understood as making up a coherent discourse. The essential difference between Dressler and Sacks is that the latter is concerned with the process of interpretation as well as the resources of knowledge which the interpreter draws upon. We might say that concepts like "membership categorization device", "category" and "category-bound activities" are basically the sociological formulation of information which is represented by the linguist in terms of the semantic structure of the language system, and they would presumably be accounted for by Dressler as such. This, of course, brings up the question of the relationship between linguistic categories and the categories of social knowledge which we will take up again presently. For the moment what we have to notice is that these sociologically defined constructs of Sacks' have their linguistic analogue in semantic structure and may therefore be considered as accounting for competence. In addition, however, Sacks' "apparatus" includes performance rules application of which yields communicative value. It is these rules which represent the language-users' strategies, what Garfinkel refers to as the "contingent on-going accomplishment" whereby values are generated in the development of the discourse itself.

It might be objected that Sacks' analysis is altogether too detailed and his apparatus too complex. In answer to this objection one must point out that what is being attempted here is a generative account and to be generative an account is required to be explicit on the one hand and productive on the other. Sacks attempts to make explicit procedures which are generally taken for granted as being matters of "common sense" – it is indeed that investigation into what is counted as common sense, making what appears to be simple into something problematic, that is the principal concern of ethnomethodology. In this respect, the ethnomethodologists are simply approaching the description of language use in the same way as the linguists have approached the description of the language system. To consider just one example: to give an explicit account of the "simple" sentence "Claude is a man", Langendoen (1969) finds it necessary to postulate a deep structure which contains five embedded sentences and six occurrences of the indefinite pronoun "one" (see 6.2.3). He justifies this complexity in the following comment:

Only something so abstract can possibly serve as a representation of how a sentence such as 6.13 (i.e. "Claude is a man") is understood intuitively by fluent speakers of English. (Langendoen 1969: 101)

As has already been observed (6.4.2), fluent speakers of English are not generally called upon to understand sentences like this, or any other sentences for that matter, as isolated units. If they were, then Langendoen's representation (or something more complex) might well be required to account for such understanding, and the complexity is warranted by the need for explicitness. The same claim is implicit in Sacks' analysis of the performance process: only something so abstract as his set of devices and application rules can possibly serve to account for how the piece of language he considers is understood intuitively by fluent speakers of English. Sacks also justifies the complexity of his apparatus by reference to the need to be generative in the sense of productive as well as explicit:

If our analysis seems altogether too complicated for the rather simple facts we have been examining, then we invite the reader to consider that our machinery has intendedly been “overbuilt”. That is to say it may turn out that the elaborateness of our analysis, or its apparent elaborateness, will disappear when one begins to consider the amount of work that the very same machinery can perform. (Sacks 1972: 336)

9.2.4. *Conditions and contexts. Labov and Firth*

Sacks’ application rules are then, attempts to make generative statements about the procedures which the language user employs in making sense of linguistic forms, or, in terms used elsewhere in this study, in deriving discourse from text. His rules are essentially of the same nature as those outlined in Labov (1969) in that they:

... show how things are done with words and how one interprets these utterances as actions: in other words, relating what is done with what is said and what is said with what is done. (Labov 1969: 54)

What Sacks rules attempt to show is how linguistic forms are understood as referring to persons and events, how what is said in two utterances can be recognized as counting as a description. In the case of both Labov and Sacks, the communicative value of what is said arises from a recognition of how linguistic forms realize the conditions that must be met for acts like descriptions, questions, orders and so on to be performed.

One set of conditions which has received a good deal of attention is that which determines how utterances are understood to constitute question and answer sequences. Labov, for example, considers the following utterance:

(6) *You live on 115th Street.*

If certain conditions are met, this utterance will count as a question. To arrive at these conditions, Labov makes a simple distinction between two kinds of event: A events, which the speaker, A, knows about and the hearer, B, does not; B events which the hearer knows about and which the speaker does not; and A-B events which both interlocutors know about. The conditions whereby (6) counts as a question can be stated as follows:

If A makes a statement about a B-event, it is heard as a request for confirmation. (Labov 1970: 80)

If (6), then, is such a statement, then it would count as a question, to which an appropriate reply might be:

(7) *No, I live on 116th Street.*

or even:

(8) *I live on 116th Street.*

It should be noticed that there is no cohesion between (6) and (8). The two utterances form a discourse because the fact that they meet the required conditions establishes coherence between them (see 4.1.3).

Sacks considers another simple rule for question-answer sequence in ordinary two-party conversation. It runs as follows:

If one party asks a question, when the question is complete, the other party properly speaks, and properly offers an answer to the question and says no more than that. (Sacks 1972: 343)

To this he adds a second rule, which he calls a chaining rule, which states that:

A person who has asked a question can talk again, has, as we may put it, “a reserved right to talk again,” after the one to whom he has addressed the question speaks. *And*, in using the reserved right he can ask a question. (Sacks 1972: 343)

These rules together generate an indefinite sequence of the form Q-A-Q-A-.... Sacks then discusses a sequence of the following kind, which represents a common way in which children open a conversation:

- (9) A: *You know what?*
 B: *What?*
 A: *(I saw Bessie Bighead near our barn last night.)*

Sacks explains what is going on here by referring to his sequencing rules. He points out that the chaining rule is, as it were, reversed in that the initial speaker, A (the child) frames his question in such a way as to involve his giving up his reserved right to speak again to the initial answerer, B. Since B's answer is in effect a question, however, A is required to answer it, and since B's question is simply one which echoes A's opening question, A is now free to say whatever he wanted to say in the first place. One can say that (9) represents a procedure whereby the initiator of the conversation retains the initiative.

The problem of how disruptions in the normal Q-A-Q-A-sequence can be accounted for is also taken up in Schegloff (1971). In Ashby (1972) (where this and other examples of ethnomethodological work is reviewed) the following simplified instance of one of Schegloff's sequences is given. This takes the form Q-Q-A-A-:

- (10) A: *Just where is this address?*
 B: *Well where do – which part of the town do you live?*
 A: *I live at four ten East Lowden.*
 B: *Well you don't live far from me.* (Ashby 1972: 9)

According to Schegloff, the first and last utterances here constitute the “base” question-answer and the second and third constitute what he calls an “insertion sequence”. The interesting question is: how is this insertion sequence understood as such before the base answer is produced? Schegloff explains this by invoking the key ethnomethodologists' concept of discourse as an on-going and developing process. He argues that the second utterance in (10), although not an answer in itself, prepares the way for an answer by delimiting a framework of reference within which the answer will be meaningful. That is to say, B wishes to establish some common knowledge of locality by reference to which he may specify where he lives.

What we find in the work of Labov and the ethnomethodologists is a number of attempts to formulate sociologically based rules of use which specify the conditions whereby linguistic forms take on particular communicative functions. In a sense, their work is an extension into “ordinary” discourse of the studies of the rhetorical structuring of such restricted and ritualistic discourse forms as riddles, charms and folktales (see, for example, Armstrong 1959; Powlison 1965; Sebeok 1964; Hendricks 1967). Their work is also related to that of Firth. Like him they adopt a sociological perspective to the study of language (though the informing sociological theory is, of course, different) and concern themselves with the investigation of “linguistic events in the social process.” (Firth 1957: 181). Firth continually stressed the importance of regarding linguistic phenomena in relation to actual contexts of use and rejected the notion that linguistics should confine its enquiry to the abstract systems of *langue*. The apparatus (his own term is “scaffolding”) with which he hoped to make “statements of meaning”, that is to say to specify the meaning of language items in use, is his “context of situation”, and it is of interest to consider how this notion relates to the approach taken by Labov and the ethnomethodologists which we have just been discussing. This consideration of Firth’s notion of “context of situation” will serve as a transition from a discussion of theoretical issues in this chapter to a discussion of practical issues in the next, and will lead in to a discussion of the relevance to language teaching pedagogy of the approach to discourse analysis that has been proposed in this study.

Firth represents his context of situation as a “schematic construct” consisting of “a group of related categories at a different level from grammatical categories but rather of the same abstract nature”. These categories are as follows:

- A. The relevant features of participants, persons, personalities.
 - (i) The verbal action of the participants.
 - (ii) The non-verbal action of the participants.
- B. The relevant objects.
- C. The effect of the verbal action. (Firth 1957: 162)

It is not difficult to see that these categories could be recast in terms of the speech factors outlined in Hymes (1962) and discussed in Chapter 4 of this study (4.4.1). Thus A has to do with addresser and addressee, B with topic and setting, and so on. These factors enter into the specification of conditions on the effective performance of different communicative acts as is clear from the outlines of such sets of conditions in Austin 1962 (pp. 14-15), Searle 1969 (pp. 57-68) and Labov 1970 (pp. 80-82). Thus, conditions on the act of ordering someone to do something, as postulated in Labov (1970), draw on the addresser and addressee factors in that the role relationship between them must be one which at the moment of speaking allows for a certain assignment of rights and obligations. It seems to me, therefore, that Firth’s context of situation can be seen as a schematic framework within which specific conditions attendant upon different communicative acts can be indicated. The key term in Firth’s scheme, of course, is “relevant”, and rele-

vance has to do with the way situational features correspond with particular sets of conditions.

I am suggesting, then, that Firth's schematic construct is, or can be taken to be, a device for establishing communicative function in that it provides a speech factor framework for the specification of conditions attendant upon different communicative acts. Furthermore, there is evidence, I think, that this is what Firth had in mind (although it must be conceded that with Firth one can never be sure). He frequently links the notion of situation with that of linguistic function and suggests that a study of the former is intended as a means of characterizing the latter. In his paper, "The technique of semantics" (Firth 1957, pp. 7-33), for example, the following remarks follow suggestions as to how the need for "the adequate description and classification of contexts of situation" might be met:

It is perhaps easier to suggest types of linguistic function than to classify situations. Such would be, for instance, the language of agreement, encouragement, endorsement, of disagreement and condemnation. As language is a way of dealing with people and things, a way of behaving and making others behave, we could add many types of function – wishing, blessing, cursing, boasting, the language of challenge and appeal, or with intent to cold-shoulder, to belittle, annoy or hurt, even to a declaration of enmity. The use of words to inhibit hostile action, or to deal or modify it, or to conceal one's intention are very interesting and important 'meanings'. Nor must we forget the language of social flattery and love-making, of praise and blame, of propaganda and persuasion. (Firth 1957: 31)

In "A synopsis of linguistic theory 1930-55" (Palmer 1968: pp. 168-205), which is in effect a summary statement of Firth's theoretical position, Firth suggests that a classification of contexts of situation might be approached from a consideration of functions – presumably of the kind mentioned in the quotation cited above:

No hard and fast lines can be drawn at present to form a strict classification for contexts of situation. Some might prefer to characterize situations by attempting a description of speech and language functions with reference to their effective observable results, and perhaps also with reference to a linguistically centred social analysis.

The technical language necessary for the description of contexts of situation is not developed, nor is there any agreed method of classification. (Palmer 1968: 177)

I would argue that the approach that Firth sees some people might prefer is precisely that taken by Labov and the ethnomethodologists and by Searle and that in consequence we are moving towards an agreed method of classifying contexts in terms of conditions. Firth's theory of contextual meaning has been criticised on the grounds that it neglects such basic semantic concepts as reference and sense (see Lyons 1966). I think that essentially Firth's theory is a theory of pragmatic and not semantic meaning and confusions arise in his writings largely because the two are not distinguished. Confusions arise in recent work in generative semantics for the same reason, as was pointed out in Chapter 5. Recent work in discourse analysis such as has been reviewed above and in Chapter 4 enables us to take a

fresh look at what Firth had to say, and to do more justice, perhaps, to the insights he has to offer by interpreting them from a different point of view.

9.2.5. *Communicative dynamism*

I have pointed to a theoretical consistency between Firth's programmatic statements concerning contextual meaning and the approach to the characterization of discourse as exemplified by Labov and the ethnomethodologists. One might also point out that the precepts of the latter correspond very closely with those of the Prague School as discussed in 4.3.1. and 6.5.1. Both think of discourse in terms of a dynamic process. In discussing his concept of "communicative dynamism" Firbas makes the following remarks:

It (i.e. communicative dynamism, or CD) is based on the fact that linguistic communication is not static, but a dynamic phenomenon. By CD I understand a property of communication, displayed in the course of the development of the information to be conveyed and consisting in advancing this development. By the degree of CD carried by a linguistic element, I understand the extent to which the element contributes to the development of the communication, to which, as it were, it 'pushes the communication forward'.....I believe that much valuable light can be thrown on the function of language in the very act of communication by a *consistent* inquiry into the laws determining the DISTRIBUTION of degrees of CD over linguistic elements capable of carrying them.

(Firbas 1972: 78)

These remarks seem to me to be very much in the ethnomethodologist spirit and the work of Sacks and Schegloff briefly discussed above can be seen as an attempt to characterize communicative dynamism from a sociological point of view. I would claim, too, that the discussion in Chapters 6-8 of this study represents an enquiry (though perhaps not as consistent as Firbas might wish) into the laws which determine communicative dynamism "in the very act of communication". Although this is only a beginning, it perhaps does point to the need for sociological and linguistic perspectives on language to converge in any satisfactory approach to the analysis of discourse.

CHAPTER 10

PEDAGOGIC APPLICATION

10.1. The contextual element in language teaching

The purpose of this study, as outlined in Chapter 1, was to discover an approach to the description of discourse which will provide insights which can be exploited in the preparation of language teaching materials for foreign students of English who need the language as a medium for their specialist studies. The search for such an approach has involved the assessment of a range of work which might reasonably claim to be concerned with the description of language in use. Much of this work has been set aside as inadequate for dealing with discourse as a communicative process, valuable though it may be in throwing light on other aspects of language. Some of this work, on the other hand, does point the way towards accounting for the communicative process and the approach presented in Chapters 6-8 is essentially a development along the lines it indicates.

What in effect I have done in this study is to reject a correlational approach to discourse analysis in favour of a transactional one (see Pride 1971a). I have preferred this latter because it seems to me to bring out the essential dynamic and creative character of language use and therefore to be more descriptively adequate. But it is also more satisfactory on applied linguistic grounds since it aims at accounting for just those aspects of “knowing” a foreign language which, generally speaking, secondary schools neglect to teach and which the learners I have particularly in mind need to be able to handle. Much of the teaching that goes on in the English lesson (at least in the developing countries I am familiar with) implies a correlational view of language use in that structures are directly associated with situations on the assumption that the communicative value of the structures will be discovered by the learner as a function of the correlation between the two. It is apparent, however, (as was pointed out in Chapter 1) that the learner does not discover value for himself through this correlational procedure. What I suggest is needed is for the teacher to consider the kind of transactional view of language use that this study presents. I want now to consider what is involved in taking such a view.

The interpretation of Firth’s context of situation as an abstract framework within which conditions on communicative acts can be specified (9.2.4) points to a need for a reappraisal of this notion as it is applied in language teaching. It has become axiomatic over the past two decades that language items presented in the classroom should be “contextualized” by means of “situations”. The supposition is that, by so doing, the teacher simulates a natural use of language (for a representative statement of this belief see Billows 1961, Ch.1). What I want to do now is to examine this supposition and suggest certain limitations of “situational” language teaching as a prelude to a consideration of how the approach to discourse analysis that has been proposed in this study can be exploited for pedagogic purposes.

10.1.1. *Situational exemplification and representation*

We may begin by considering a typical statement of the orthodox “situational presentation” view:

Whether it is in the use of the Present Continuous or the Past Simple or the verb *may* we are planning to teach, we have to think ourselves into appropriate situations – situations that will show our pupils absolutely clearly how the form is used ... We must therefore try to think of suitable classroom situations in which the form can be used naturally. (Bruton 1965: 180)

The kind of situation that Bruton has in mind is one in which the teacher performs, or has pupils perform, a number of actions to the accompaniment of verbal commentary of the following sort:

I am opening this packet.
I am opening this door.
I am opening this box.
He is opening this packet.
He is opening this door.
He is opening this box.
 etc.

By suiting actions to words in this way the meaning of the tense form is demonstrated to the learners and established by repetition. But what is being demonstrated, of course, is the signification of the form, not its communicative value. To utter the sentences cited above in performing the action to which they refer cannot be said to constitute a demonstration of how this form is “used naturally”. As was pointed out in Chapter 7 (7.4.4), one of the conditions on the effective performance of the act of commentary is that what is commented on is not so obvious as to need no comment. The whole point of associating actions with words in Bruton’s demonstration, however, is that what is being commented on *is* obvious: if it were not, then the signification could not be taught. In this instance, then, the procedure for teaching signification precludes any possibility of teaching value (except in the restricted metalinguistic sense mentioned in 7.4.4): teaching the former is inconsistent with teaching the latter.

If one takes it that the way in which the present continuous form is “used naturally” is when it is used to perform a communicative act such as a commentary, then it is clear that in the kind of demonstration or “situation” which Bruton uses the form is not used naturally, and indeed cannot be used naturally if it is to demonstrate signification. The same point can be made in relation to “situations” which consist of what are known as “action chains”, whereby a series of sentences is produced of the following kind:

I am going to write on the blackboard. I am writing on the blackboard. I have written on the blackboard.

The accompanying actions here serve to bring out the different meanings of these tense forms as tense forms. But the link between the sentences is a purely

paradigmatic one and does not combine them into a text. The sentences are simply "citation forms" (see Hasan 1968: 5-7) which have been arranged in such a way as to make their signification as code elements clear. They are in fact, sentences in the strict sense defined in 6.3, whose function is to exemplify grammatical rules (see Widdowson 1972c). As utterances they have no value

The kind of classroom situation we have been considering, then, may serve a useful purpose for the teaching of the language system but it does not, and cannot of its nature, indicate the communicative value of linguistic forms. In so far as the sentences are used to demonstrate the meaning of certain of their constituents they represent only the teacher's exploitation of the metalinguistic function of language. However, not all classroom situations are as unnatural as those we have been considering. Although in the early stages in a course linguistic structures are generally presented in the kind of demonstration situations exemplified by Bruton, there is usually an attempt later on to introduce more realistic ones in the form of simple dialogues. We might make a terminological distinction here and say that whereas in Bruton we have situational *exemplification*, in the more realistic dialogues we have situational *representation* in that they attempt to give sentences a locutionary character (see 6.3).

We may take the following as an example of situational representation:

- Mrs. Green: Somebody's knocking at the door. Can you open it, please?
 Mr. Green: It was the postman. He brought this postcard for us.
 Mrs. Green: Who's it from?
 Mr. Green: (reading from postcard) It's from Aunt Mary. She's in Brazil. She's having a nice time and she's coming back in September.
 Mrs. Green: Very nice. Oh, heavens! the telephone's ringing. Can you answer it, please? My hands are all wet.
 Mr. Green: (looking at his coffee) Not again!
 Mrs. Green: Who was it?
 Mr. Green: Wrong number!
 Mrs. Green: Oh dear!
 Mr. Green: Can I sit down and finish my cold breakfast now?
 Mrs. Green: Haven't you finished it yet? You're going to be late.
 Mr. Green: Women!*

There is an obvious attempt here to put life into the language and to represent an actual speech situation. In fact, a comparison with an actual speech situation makes it clear that in many respects this little vignette of breakfast table behaviour is very unrealistic (see Davies 1973). This lack of realism arises basically from an excess of verbal explicitness. For example, if someone knocks at the door, or if the telephone rings, no directly referential comment is generally called for: these events are part of the situation to which the language will relate. Again,

* From *Steps to Spoken English. A graded course for Spanish-speaking Students*. London. Longmans, 1968.

the relationship between husband and wife is such that a request can be made without the use of “please”, unless this relationship has taken on some temporary formality as a result of a quarrel; the situational features relating to the roles of the participants make the use of “please” redundant and therefore misleading. One might suggest the following, therefore, as utterances with greater value in these circumstances:

Mrs. Green: Albert, can you go to the door?

.....

Mrs. Green: Can you answer the phone, Albert? My hands are all wet.

In certain respects then, it seems clear that the situational representation cited above does not show the way the language system is realized as appropriate utterances. Its purpose is to present structures with the modal *can* and the present continuous verb form and the emphasis is once again on sentences and signification rather than on utterances and value. The situation serves as a means of making the learning of the language system more appealing and it provides for practice in that the dialogue can be learned and enacted in the classroom.

10.1.2. *Structural and situational syllabuses*

I have suggested that in the dialogue discussed above what we have is not a realization of language as speech behaviour but a representation of linguistic elements and this representation moreover is determined by the kinds of element – the modal *can*, the progressive aspect, interrogative forms with *please* – which are to be demonstrated. Instead of devising situations to carry pre-selected and pre-ordered linguistic units, it is possible to think of proceeding in the reverse direction by selecting situations and organizing them in accordance with such grading principles as difficulty, inclusiveness, frequency and so on (see Mackey 1965, Ch.7), then allowing these situations to determine what linguistic elements should be taught as having common occurrence in such situations. A procedure of this kind would result in a “contextual” or “situational” syllabus as opposed to a “structural” or “grammatical” one (Hill 1967; Wilkins 1972a).

There are a number of difficulties involved in constructing a syllabus along situational lines, not the least of which is the problem of knowing what a situation is. Hill suggests that one makes a syllabus of this sort by first making a selection of “structural, idiomatic and lexical items”, then “selecting, and grading into steps the contexts or situations we wanted our pupils to learn to respond to,” and then:

Finally, the structural, idiomatic and lexical items would have to be allotted to the contextual steps, and *not* vice versa, although some compromise would probably be necessary. (Hill 1967: 118)

Hill gives no indication of how his situations would be selected and no examples of the kinds of situation he has in mind. The same vague reference to “situations” is to be found too in Halliday, McIntosh and Stevens (1964). Speaking of the process of selection in preparing a language course they say:

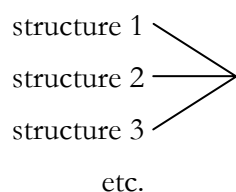
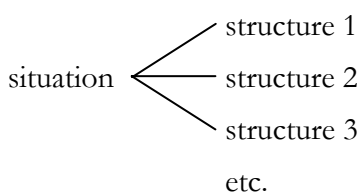
The whole process must be applied at all levels of language, so that unlike conventional vocabulary selection, which deals only with items labelled 'words' but in fact having no clear linguistic status, the inventory of teaching items is reached by considering phonology, grammar, lexis, context (semantics) and extra-linguistic situation *at every point in the process*.

(Halliday, McIntosh and Strevens 1964: 207; my emphasis)

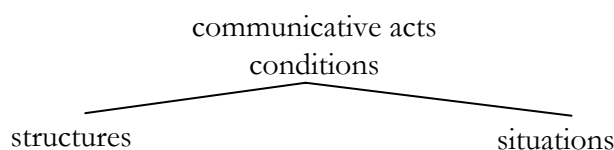
Again there is no indication how this complex process is to be carried out, and no instances of its results. One suspects that what we have here and in Hill are in fact pseudo-procedures (see Abercrombie 1965). The idea of selecting and grading situations is an interesting one, but it is difficult to see how it can be put into effective practice with the degree of precision suggested in these two quotations in the absence of any clear definition as to what constitutes a situation.

One can, of course, argue that precision is not necessary anyway, and that it is perfectly possible to draw upon one's intuitive knowledge of language use by selecting a number of situations which it is likely that the learner will encounter, like buying a railway ticket, booking in at a hotel, ordering meals in a restaurant, going to the cinema and so on, and then writing dialogues which represent the kind of verbal interaction which would take place on such occasions. What has to be noticed, however, is that this kind of representation requires the learner to extrapolate from the situation those features which have a bearing on the communicative value of the linguistic elements he is presented with. We do not want him to associate *all* of the language with just *one* situation: we want him to recognize which features of the situation are relevant in making particular linguistic elements appropriate ones to use. It is obvious that we do not want to teach him to say, for example, "I should like a 2nd class return ticket to Leamington Spa" or "Could I have the wine list please" as automatic responses to being at a railway ticket window or a restaurant, but to know how to ask for a service, of which these are instances. We assume, in other words, that he will be able to single out from the situations in which language is presented just those conditions which are relevant to the assignment of communicative value to the different parts of the dialogue.

We return, then, to the key notion of relevance. The relevant features of a situation with regard to the meaning of the linguistic elements which occur in it are just those features which serve as conditions which control the communicative value of those elements. If one is to define a situation, therefore, it seems reasonable to suppose that one will define it as exemplifying certain conditions. Instead of associating linguistic forms directly with situations, thus leaving the learner to discover relevance for himself, we need to establish the conditions which mediate between the two. The structural and situational approaches to language teaching might be represented simply as follows:

structural approach**situational approach**

The view of language use developed in this study suggests that the kind of approach that is needed is one which might be represented as follows:

**10.1.3. Notional syllabuses**

Such a concept of the “content” of language teaching courses as is represented in the last of these diagrams underlies certain recent proposals in Wilkins (1972a, 1972b), Candlin (1972) and Widdowson (1971). What these proposals amount to is that what language courses should aim at teaching is not linguistic structures in association with situations but communicative functions. Wilkins puts it this way:

The grammatical and situational approaches are essentially answers to different questions. The former is an answer to the question *how?* How do speakers of Language X express themselves? The latter is a response to the questions *when?* or *where?* When and where will the learner need the target language? There is, however, a more fundamental question to be asked, the answer to which may provide an alternative to grammatical or situational organizations of language teaching, while allowing important grammatical and situational considerations to continue to operate. The question is *what?* What are the notions that the learner will expect to be able to express through the target language? It should be possible to establish what kind of thing a learner is likely to want to communicate. The restriction on the language needs of different categories of learner is then not a function of the situations in which they will find themselves, but of notions they need to express. (Wilkins 1972a: 4-5)

Wilkins proposes a semantic or notional syllabus comprising a selection of notional categories, of which he specifies two types. The first are “semantico-grammatical” categories which, as their name indicates, are elements from the language system grouped together in ways which make their meaning potential more evident. The second are what are called “categories of communicative function” and these are pragmatic elements of language use. These latter are also grouped together and it is of interest to the present argument to consider the principles that appear to lie behind the groupings. For example, there is a super-ordinate category called “suasion” within which is included a function called

“prediction” which in turn is super-ordinate to a range of communicative acts, including warning, threatening, instructing, directing, and inviting. A second sub-category under the super-ordinate “suasion” is also called “suasion” and this includes acts like persuading, suggesting, advising, recommending, advocating, proposing, exhorting, begging and urging. The question is: on what grounds have certain acts been assigned to one category rather than to the other? Wilkins provides a criterion for his general “suasion” category within which the sub-category “suasion” and that of “prediction” is included: it is “utterances designed to influence the behaviour of others”. What this is, in effect, is a condition which all utterance types subsumed by his major heading of “suasion” must meet. The further division is done intuitively (at least, Wilkins mentions no further criteria for categorization) but clearly each sub-division must be accounted for in terms of further conditions. The difference between a suasive and a predictive act must be that one meets a condition or conditions which the other does not. In the appendix to Wilkins 1972b (which is a more detailed exposition of the proposed syllabus than is given in Wilkins 1972a) one or two conditions are in fact specified. Under the category of “suggestion”, for instance we have the gloss:

Proposes a possible course of action. Differs from “advice” in that it does not carry the speaker’s recommendation and has no implication of benefit for the hearer. (Wilkins 1972b: 26)

Wilkins’ notional approach to language teaching was developed to meet specifically European needs, and it is assumed that the categories of communicative function are common within European culture as a whole. As he puts it:

It is argued that a syllabus for the teaching of any European language can be derived from this approach and that a syllabus thus expressed in universalistic terms can be interpreted according to the forms of the different languages to be taught and in this way a high degree of comparability between schemes for the teaching of different languages can be achieved.

(Wilkins 1972a: 8)

The assumption of universality is perhaps justified in these circumstances and in consequence there is no need to spell out the conditions which define different communicative acts. Elsewhere, however, Wilkins makes a stronger claim:

The notional choices which a speaker makes are almost certainly universals of communication. Languages will differ enormously in the ways they realize these universals but it seems likely that people everywhere need to express the same kinds of notion.

(Wilkins 1972: 148)

In Chapter 7 above (7.2.2. and 7.3), reasons were given for holding the view that communicative acts may not be universal even within one speech community and certainly it seems likely that people in different communities will have *different* notions to express, that a promise or a threat or advice or recommendation in our own culture may have no exact analogue in another. These are, after all, names we give to forms of social behaviour which we recognize by virtue of our knowledge of the way our society is organized, of the way rights and obligations are associated with certain roles, and so on. It may be, of course, that there are certain universals of social behaviour but they must be discovered, not assumed.

Presumably one way of discovering them is to establish the conditions attendant upon what appear to be comparable communicative acts across cultures. What one would expect is that there is a set of universal social categories in terms of which communicative acts in different cultures can be compared.

The lack of explicit definition as to what constitutes the kind of communicative function that Wilkins deals with makes it unlikely, it seems to me, that his syllabus is exportable outside Europe. At the same time, the communicative competence it aims at teaching represents the kind of terminal behaviour that is required by students who need the language to further their specialist studies, and whose needs, as was pointed out in Chapter 1, provoked this present enquiry. I would argue that if one is thinking of initial teaching in countries outside Europe an effective notional syllabus is dependent upon a set of explicit rules of use which would characterize different communicative acts in terms of the necessary and sufficient conditions for their effective performance. For a teacher to use the kind of notional or communicative teaching units proposed by Wilkins (and by Candlin 1972) he would have to be familiar with rules of use as well as rules of grammar. But how does he acquire this familiarity? His own education will have acquainted him with grammatical rules of one kind or another, and even if these rules are inadequate they will have provided him with a way of exteriorizing his knowledge of the language and so prepared him for teaching it to others. In a sense it matters less that the grammar a prospective language teacher learns is defective than that he learns some formulation of what he knows, since it is by means of this formulation that he can effect the transition from learner to teacher: he has something external and explicit to which he can make reference. But there are no rules of use to which he can refer and there is no sense in expecting him to devise his own.

It is to be hoped that in course of time discourse analysis along the lines suggested in this study and exemplified embryonically in Chapters 6-8 and in the work of Labov, Searle and others will yield rules of use which can then be restated in appropriate pedagogic terms. What I have in mind is a kind of pedagogic rhetoric analogous to pedagogic grammar: an interlevel formulation which mediates between a descriptively adequate set of sociolinguistic rules and the language teaching textbook (see Allen and Widdowson, *in press*). Meanwhile, it seems clear what kind of rules these are likely to be and following the principle put forward in Chapter 1 of this study there seems no reason why the applied linguist should not now proceed independently in developing the insights of recent work in discourse analysis to produce pedagogically orientated rules of use. As I put it elsewhere:

Meanwhile, the applied linguist, working, as it were, from the pedagogic end, can begin to specify the nature of different communicative acts, the way they are realized, the way they combine in different varieties of language use. These specifications may well develop from attempts to design language teaching materials which focus on the teaching of discourse. The applied linguist does not always have to wait, indeed, he cannot always wait, for the linguist to provide him with something to apply. He may follow his own path towards pedagogic application once the theorist has given a hint of the general direction.

(Widdowson 1973a: 76)

10.2. A rhetorical approach to presentation

But this is in the future. In the present absence of a pedagogic rhetoric to which teachers can make reference it seems unlikely that general secondary education will provide for the teaching of the kind of communicative skills which are required by students who need English as a medium in their further education, particularly those in developing non-European countries. Even if such rhetorics were available, reform in English teaching in developing countries would be slow and to attempt to impose a “new” approach on teachers would only be to repeat the mistakes of the past. English teaching in these countries has suffered badly in the past by the imposition of pedagogic dogma: all too often an approach to teaching applicable to one set of circumstances has been given the status of a universal creed. The usual consequence of this has been that teachers have been led to renounce their faith in their own methods in order to embrace principles which they do not fully understand and cannot effectively practise. One has to be wary of radical change.

It should be noted, too, that even if the “content” of language teaching courses were changed so as to include the kind of communicative units described by Candlin and Wilkins it would only account in part for the ability to handle discourse. The functions in Candlin’s “communicative syllabus” and Wilkins’ “notional syllabus” are linked to sentences in the manner of Searle’s analysis of speech acts. But as was pointed out in Chapter 4 above, communicative function in discourse ranges over sentence boundaries and there is no reason for associating it with the sentence as the maximal grammatical unit. It may be that grading considerations require that communicative function should be associated with sentences in a notional syllabus and this leaves the problem of how learners are to recognize functions which range over a series of sentences in actual discourse and how the illocutionary force of one utterance is conditioned by that of others, as discussed in Chapter 7 of this study. In other words, we have still to develop in the learner the kind of strategy of understanding whereby he is able to recognize the value of linguistic elements as they occur in discourse, not as pre-established meanings but as generated from within discourse itself, the kind of strategy which Garfinkel refers to as the “contingent on-going accomplishment” of “practical reasoning”. (see 9.2.1.)

It seems likely, then, that English teaching in the secondary schools of developing countries will for a considerable time to come continue to be based on a structural syllabus of the familiar kind. The question then is: how can one provide for the communicative needs of students entering further education? This study began by pointing out the problem of preparing teaching materials for newly emerging ESP and EST needs and what we have been concerned with throughout is the search for insights that might be exploited in the preparation of such material. How then can the approach to discourse analysis that has been proposed be exploited, given that the students we have in mind will have received instruction in the system of English and will thereby have acquired grammatical rather than communicative competence?

What I want to propose is that the kind of communicative approach which was diagrammatically presented above and which underlies the Candlin-Wilkins proposals for syllabus design should be applied not at the selection and grading stages of the learning process but to presentation procedures at a later stage of language learning. What this involves is a utilization of the learner's existing knowledge and an extension of his experience of language, both of English and of his own mother tongue. I will assume that after four or five years of formal secondary school education the learner will have acquired two kinds of knowledge, two kinds of language experience. Firstly, he will have some knowledge of the formal properties of English: he will have some degree of competence in the comprehension and composition of English sentences. Secondly, he will have acquired some knowledge of the other subjects in the school curriculum – history, geography, general science and so on, and in acquiring this knowledge he will necessarily be learning the way the language used as a medium for these subjects functions as communication. Learning in these subjects involves, I would argue, not simply the reception of facts but ways of thinking which are expressed through different rhetorics. To learn science, for instance, is to learn certain modes of reasoning, certain ways of accounting for physical reality; and as a consequence to be initiated into certain rhetorical modes, certain ways of communicating.

It would seem reasonable to suppose, then, that at end of, let us say, the fourth or fifth year of secondary education (this period will of course vary according to the country concerned) the learner will have had a fair amount of experience of the formal properties of language as exemplified through English, and a fair amount of experience in the functional properties of language as exemplified through the language which serves as the medium for other areas of his education. My suggestion is that teaching materials should be devised which will bring these two kinds of experience into association. What we need to do is to show how English structures, previously manipulated as formal objects, can be used to fulfil functions previously only associated with the other language. To use Halliday's term, we need to provide the learner with a new "model" of English (Halliday 1969), and this we do by, as it were, grafting the forms of English on to the functions which constitute the rhetoric of the other subjects in the curriculum and which have been realized by the other language. In so doing we of course make the learner's knowledge of these functions explicit.

10.2.1. Exercises in discourse comprehension

Let us suppose that we decide to associate English with scientific uses of language and that our principal purpose is to develop in our students the ability to handle written communication. We might begin by devising a reading passage on a topic with which the learner is already familiar and then asking comprehension questions on it. This is, of course, a well-worn procedure (see, for example, Brookes and Ross 1967; Ewer and Latorre 1969; Hawkins and Mackin 1966, etc.), but the comprehension questions that I have in mind would be somewhat different in purpose. The questions to be found in the works cited above are placed at the end

of the reading passage and test the learner's understanding of the content. Essentially the question they ask is: what does the learner understand about this passage? What we are interested in, however, is not so much whether or not the learner has understood but in developing in him an awareness of how he understands, of *how* the language functions in the conveying of ideas, information and so on. We want to draw his attention to the way he understands in the actual process of reading. To this end, comprehension questions are not placed at the end as a check on the results of the process, but are inserted within the passage itself as a check on the process itself. But it is not enough simply to ask questions: they will not indicate how understanding takes place and will not direct the learner's notice to the way in which English linguistic forms fulfil communicative functions comparable to those of the language through which the kind of science content being presented was learned in the first place. Part of the learner's ability to understand the passage will come from his familiarity with the content and the rhetoric related to it – from his knowledge of a scientific mode of communication. What we need to do is to associate this familiarity explicitly with the linguistic forms in the passage. We might do this, I suggest, by providing each comprehension check with a solution which makes explicit what process of interpretation is required for the learner to arrive at the correct answer.

Let us now see how a passage treated as suggested above would appear (the following is an example from Allen and Widdowson in press).

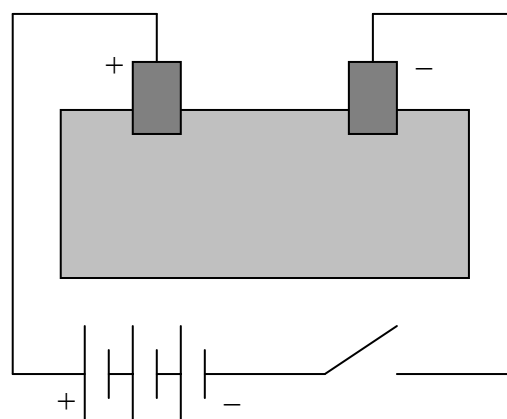
Electrolysis

¹Some liquids which act as conductors of electricity decompose when an electric current is passed through them. ²Such liquids, usually solutions of certain chemicals in water, are known as electrolytes. ³The process by which they are decomposed is called electrolysis.

⁴In electrolysis, two wires or pieces of metal connected to a battery or cell are placed in a vessel containing an electrolyte. ⁵These are called electrodes. ⁶The electrode connected to the negative terminal of the battery (marked (-) in Figure 1) is called the cathode, and that which is connected to the positive terminal, which is marked (+) in the figure, is called the anode.

⁷When the current is switched on, it passes from the battery to

Figure 1



the anode and then through the electrolyte to the cathode, passing from there back to the battery. ⁸*As the current passes from one electrode to the other a chemical reaction takes place.*

At this point we introduce comprehension check questions. These take the form of statements which the reader has to adjudge either true or false. For example:

- a) Liquids which decompose when an electric current passes through them are called electrolytes.
- b) Electrolytes are solutions of certain chemicals in water.
- c) A cathode is an electrode which is connected to the negative terminal of a battery.
- d) A chemical reaction takes place when an electric current passes through an electrolyte.

It is possible, of course, to introduce questions at the end of each paragraph. The reason why this is not done here is because the passage we are using as illustration comes at a later stage of the book referred to, when it is assumed the reading strategy which such questions are designed to develop will have been acquired to the extent of enabling the learners to cope with longer stretches of language. In the earlier stages comprehension checks of this kind do appear at more frequent intervals.

The learner is then directed to the solutions associated with each of the questions given above (the numbers in parentheses refer to the numbered sentences in the passage):

- a) Some liquids which act as conductors of electricity decompose when an electric current is passed through them. (1) *Such liquids* are known as electrolytes. (2)
- i.e. The liquids which decompose when an electric current is passed through them are known as electrolytes.
 ‘is passed’ = ‘passes’
 ‘are known as’ = ‘are called’
 ∴ *Liquids which decompose when an electric current passes through them are called electrolytes.*
- b) Electrolytes are solutions of certain chemicals in water.
 = ALL electrolytes are solutions of certain chemicals in water.
 = Electrolytes are ALWAYS solutions of certain chemicals in water.
- but** Such liquids, usually solutions of certain chemicals in water, are called electrolytes. (2)
- i.e. Electrolytes are USUALLY (i.e. not always) solutions of certain chemicals in water.
 = MOST (i.e. not all) electrolytes are solutions of certain chemicals in water.
- ∴ It is NOT TRUE that electrolytes are solutions of certain chemicals in water.

- c) The electrode connected to the negative terminal of a battery is called the cathode. (6)
 = The cathode is the electrode connected to the negative terminal of a battery.
 = The cathode is the electrode *which is* connected to the negative terminal of a battery.
 = *A cathode is an electrode which is connected to the negative terminal of a battery.*
- d) As the current passes from one electrode to another, a chemical reaction takes place. (8)
 It (i.e. the current) passes to the anode and then through the electrolyte to the cathode. (7)
 ‘from one electrode to another’ = ‘from the anode to the cathode’
 i.e. through the electrolyte.
 ∴ As the current passes through the electrolyte, a chemical reaction takes place.
 = A chemical reaction takes place as the current passes through the electrolyte.
the electrolyte here refers to any electrolyte.
 ∴ *A chemical reaction takes place when an electric current passes through an electrolyte.*

What the solutions do is to indicate the communicative value that different linguistic elements of the passage assume in the context of this particular discourse and represent the reasoning process which underlies the practised reader's ability to realize such values. As such they make explicit the learner's knowledge of the working of discourse acquired through his experience of one language and link up this knowledge with what he knows of the structures of English. These solutions are intended as a pedagogic device, in fact, for the development of the kind of “practical reasoning” represented by the ethnomethodological rules of Sacks and Schegloff discussed in the previous chapter.

I have tried to show how the approach to discourse analysis outlined in this study suggests a type of comprehension exercise which differs from the conventional kind. Similarly, this approach can provide insights which can be exploited in other exercises. An awareness of how value can be derived by the processes of selection, extension and suppletion, as discussed in Chapter 6 (6.6), for example, might be developed by exercises of the following sort:

Exercise: contextual reference

Refer to the context in which the following statements appear and replace the words in italics with expressions from the passage which make the meaning clear.

- 1) *Such liquids* are known as electrolytes. (2)
- 2) *These* are called electrodes. (5)
- etc.

Again, one might sensitize the learner to the way different linguistic forms take on equivalent value in particular contexts by deliberating placing alternative expressions in the passage in such a way as to make this equivalence discoverable from contextual clues. In the complete passage from which the passage given above is an extract, for example, the following expressions have been provided with contextual environments which make them equivalent: “oxygen is given off from the anode”/“the anode gives off oxygen”; “broken up into electrically charged particles”/“dissociated into ions”. A simple exercise might lead the learner to realize these equivalences:

Exercise: rephrasing

Replace the expressions in italics in the following statements with expressions which mean the same in the passage.

- 1) *The anode gives off oxygen.*
 - 2) Some of the copper *is broken up into electrically charged particles.*
- etc.

Once again the intention is to draw the learner’s attention to the way meanings are dependent upon the discourse of which they form a part and are not, as his previous learning will have inclined him to believe, pre-established and self-contained within separate linguistic elements (cf. 9.1).

10.2.2. Rhetorical transformation and information transfer

The exercises that have been considered so far are directed at developing a generative ability to comprehend written discourse. The only productive work the learner has been required to do has been simple copying. What I want to do now is to suggest types of exercise which will relate comprehension and composition and represent them not as distinct activities, as it is conventional to do, but as aspects of the same communicative process. The ability to communicate effectively depends obviously on the learner’s having internalized certain rules of use from his experience of interpretation, and the purpose of the exercises discussed above is to activate this process. We now wish to extend interpretation into production, not only in order to meet the learner’s writing requirements but also to consolidate his reading strategy. This might be brought about by two types of exercise which I have referred to elsewhere as *rhetorical transformation* and *information transfer* (Allen and Widdowson, in press). I will deal with each of them in turn.

Rhetorical transformation involves transforming a set of sentences into a discourse and one kind of discourse into another, and as such represents a pedagogic application of the rhetorical view of transformational operations illustrated in Chapter 8. We proceed by reducing part of the reading passage which the learner has already studied to a series of kernel sentences. In the continuation of the passage already discussed, for example, the following occurs:

Two pieces of platinum foil are connected to a battery. One piece is connected to the positive terminal and the other to the negative. They are

then placed in blue copper sulphate solution contained in a beaker. A test tube is filled with the solution and fixed over the anode. When the current is switched on it passes from the anode to the cathode through the solution. It will be seen that the blue solution of copper sulphate gradually becomes paler as the current passes through it. At the same time, gas is given off from the anode and is collected in the test tube.

We now break this down into kernel sentences and arrange them in random order in something like the following way:

*We place two pieces of platinum foil in blue copper sulphate solution.
We connect two pieces of platinum foil to a battery.
We fill a test tube with blue copper sulphate solution.
The current passes from the anode to the cathode through the blue copper sulphate solution.
A beaker contains blue copper sulphate solution.
We switch the current on.
etc.*

What the learner is required to do is to arrange and combine these sentences in such a way as to make them cohesive as text and coherent as discourse (see 4.1.3). Initially one might wish to make the original passage available for reference so that the learner may be gradually initiated into what is involved. But the real purpose of this exercise is to get the learner to use his understanding of the passage to recreate a discourse which he can subsequently compare with the original. What this exercise does, of course, is to reduce a piece of language use to separate structural elements which represent the “model” of English which the learner will be familiar with and then get him to realize for himself the communicative value they take on in actual discourse. Such an exercise is intended to present transformational rules not as simply formal operations which change one sentence into another but as having the kind of rhetorical function discussed in Chapter 8 of this study. At the same time, the exercise serves a remedial function in that the learner is practising and developing his knowledge of English structure, but this is not done, as is so often the case, for its own sake but as a necessary concomitant to the communicative use of the language.

So far we have considered how an unordered set of sentences can be transformed into the kind of discourse which appears in the reading passage. In the present case this might be called an *account* of electrolysis as an experiment. We may extend the scope of the exercise by having the learner transform the sentences into a different communicative act. One such act which he will be familiar with from his science lessons is one whereby an experiment is presented in the form of a set of *directions* together with a *statement of results* (cf. 7.4). If we assume that he has already been shown how English is used for this purpose in an earlier part of the course, we may ask him to transform the sentences given above to produce something like the following:

Connect two pieces of platinum foil to a battery, one piece to the positive terminal and one piece to the negative.

Place the pieces of foil in blue copper sulphate solution in a beaker.

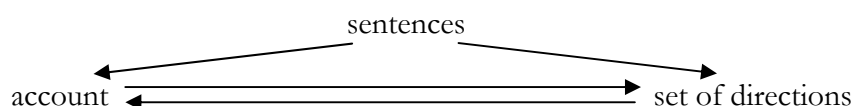
Fill a test tube with the solution and fix it over the anode.

Switch the current on.

The current passes through the solution from the anode to the cathode and the solution gradually becomes paler.

etc.

Sentences, then, might be transformed either into an account or into a set of instructions. Alternatively, the learner can be presented with one of these acts and be required to transform it into the other. These alternatives might be expressed as follows:



The written work resulting from this type of exercise, as it has been presented so far, would be closely controlled in that it would be produced by reference to the reading passage, previously studied in some considerable detail. Control could be relaxed in a number of ways to coax the learner from guided to free composition. The sentences provided, for example, could relate to topics other than those dealt with in the reading passage but which the learner would be familiar with or, if he is not, which he could find out about. In this way, his English learning would be directly related to the kind of problem solving which (one assumes) would be a feature of his science learning, and this would make a further contribution to the compounding of the two kinds of educational experience which, as was pointed out earlier, it is the purpose of this approach to teaching to bring about. One could also increase the difficulty of the problem by omitting sentences which corresponded to essential information and obliging the learner to discover and remedy the omission.

Rhetorical transformation exercises of this kind, then, are intended to develop in the learner an ability to handle information in a range of communicative functions. Information transfer exercises, on the other hand are aimed at developing in him an ability to handle information in a range of communicative forms. As was pointed out in Chapter 7 (7.4.3), if one is dealing with written discourse one cannot ignore the fact that information is commonly conveyed by non-verbal means and as we saw in that chapter the relationship between the verbal and non-verbal mode can be a complex one. In their learning of science, students will of course have had experience of such non-verbal communicative devices as diagrams and tables, just as in their learning of geography and history they will have encountered maps, charts, plans and so on. Their learning in these subjects will have involved their learning of the conventions associated with these modes of communicating. They will have acquired some knowledge as to the relationship between verbal and non-verbal means of presenting information, of how to inter-

pret a diagram or a map with and without direct reference to verbal messages and of how to use these devices to present information originating from a verbal source. What we want to do now is to make use of this knowledge to further communication skills in English.

The reading passage on electrolysis presented earlier includes a diagram which has been deliberately left unlabelled. A simple comprehension exercise of the information transfer type would require the reader to provide labels by reference to the passage, in other words to transfer information from the text to the diagram. For example:

Exercise: labelling diagrams

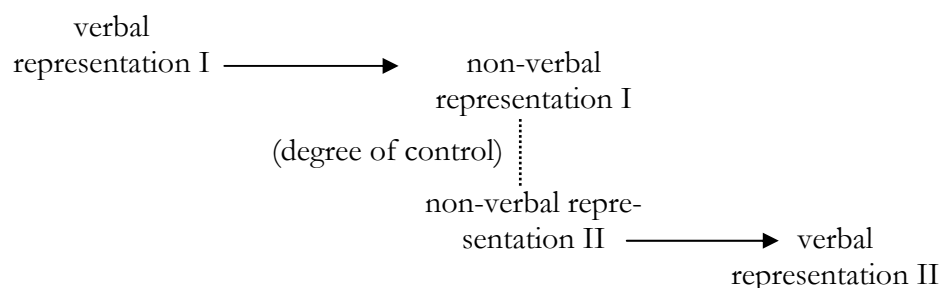
Copy Figures 1 and 2 (Figure 2 appears in the second part of the passage referred to in the discussion of rhetorical transformation exercises). Label them with reference to the following lists and draw arrows to indicate the direction of the current.

| <i>Figure 1</i> | |
|------------------------|------------|
| battery | electrodes |
| anode | cathode |
| electrolyte | switch |
| | vessel |

| <i>Figure 2</i> | |
|------------------------|--------------------------|
| platinum foil | copper sulphate solution |
| test tube | oxygen |
| copper deposit | anode |
| cathode | beaker (+) (-) |
| | battery |

A more difficult version of this exercise would require a labelled diagram with no labels provided and an even more difficult one would require the reader to provide his own diagram as well.

Transferring information from a verbal to a non-verbal mode (as in the example given above) is an exercise in comprehension which avoids the common difficulty of comprehension questions of a conventional kind in that it does not require the learner to make productive use of the language in their answers. At the same time it calls for a degree of active participation from the learner which the multiple choice type of comprehension question does not. Transferring information from a non-verbal to a verbal mode, on the other hand, is an exercise in composition. This suggests that non-verbal communication devices might be used as a transition between receptive and productive abilities in handling written discourse, as a mediating link, as it were, between comprehension and composition. Thus, for example, having presented a verbal description of an experiment and having required the learner to label or complete or compose a diagram based upon it (as in the exercise we have just considered) we might then present a diagram of another and similar experiment and require the learner to produce a verbal description which would to some degree match that of the original passage. We might represent this process (putting the principle into practice) by the following simple diagram:

COMPREHENSION*COMPOSITION*

As indicated, the amount of guidance given would be controlled by the degree of similarity existing between the non-verbal representations. Control could also be introduced of course in the choice of verbal and non-verbal representations where one would consider such criteria as length and complexity and the degree to which one mode of communication can make explicit the information carried by the other.

In the foregoing sections I have tried to show how exercises might be devised which bring into association a knowledge of language structure and a knowledge of language use previously learned separately and in relation to different languages. Such exercises are an attempt to exploit for pedagogic purposes the approach to discourse analysis which has been outlined in previous chapters.* I make no claim that the kinds of exercise I have described are in any sense definitive: as I pointed out in the first chapter of this study, all teaching material must be subject to modification according to classroom circumstances. Here the applied linguist must make way for the language teacher, and speculation must submit to the judgement of actual experience.

* Further exploitation is to be found in the "English in Focus" series to be published by Oxford University Press and to which reference is made in Allen and Widdowson (in press).

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